COLD WAR GLOSSARY

Aa

Able Archer 83, Exercise - 1983 NATO exercise that convinced the USSR of an imminent attack.

ABM - Antiballistic missile, designed to detect and intercept incoming nuclear missiles.

ABM Treaty - Part of the agreements of SALT I, whereby an ABM system was only allowed two sites and each site could only contain 100 missiles.

Absentee War - A war in which one country supports another, mainly with advisors and weapons, but where that country does not actually get involved themselves

Absorbed dose - Quantity of ionising radiation. The amount of energy imparted to unit mass of matter such as tissue. Unit gray, symbol Gy. 1 Gy = l joule per kilogram.

Acheson-Lilienthal Proposal -A U.S. initiative to outlaw nuclear weapons and to internationalize global stocks of fissile material for use in peaceful nuclear programs which became know as the Baruch Plan. See Baruch Plan.

Actinides - A group of fifteen elements with atomic numbers from that of actinium (89) to lawrencium (103) inclusive. All are radioactive. The group includes uranium, plutonium, americium, curium.

Active Defences - Active defences use weapon systems or countermeasures to defend against an attack.

Activity - Quantity of a radionuclide. Describes the rate at which decays occur in an amount of radionuclide. Specifically, it is the number of atoms that decay and emit radiation in one second. Unit becquerel, symbol Bq. One Bq corresponds to the decay of one radionuclide per second. Previously the unit was the Curie (Cu).

Acute radiation syndrome (ARS) - The onset, within hours of high dose whole body irradiation, of nausea and vomiting followed by destruction and diminished (or absent) replacement of essential blood cells resulting in vulnerability to serious infection and bleeding; recovery is possible but with increasing doses these effects are more severe and death is more likely.

Ad Hoc Group of Governmental Experts to Identify and Examine Potential Verification Measures from a Scientific and Technical Standpoint (VEREX) - Created in September 1991 during the Third Review Conference of the Biological and Toxin Weapons Convention (BTWC), VEREX was tasked with identifying measures that could be used to determine whether a state party to the BTWC was "developing, producing, stockpiling, acquiring, or retaining" biological weapons (BW). In its final report of September 24, 1993, VEREX described and analyzed 21 such measures, including but not limited to declarations of biological agents, on-site inspections, and multilateral information sharing.

Additional Protocol - The Additional Protocol is a legal document granting the International Atomic Energy Agency (IAEA) complementary inspection authority to that provided in underlying safeguards agreements. Under the Protocol, the IAEA is granted expanded rights of access to information and sites, as well as additional authority to use the most advanced technologies during the verification process.

Aerosol - A system of liquid or solid particles uniformly distributed in a finely divided state through a gas, usually air. They can play an important role in weaponizing these substances.

Agreed Framework - The 1994 agreement between the United States and North Korea (Democratic People's Republic of Korea, DPRK) to "freeze" the DPRK's nuclear program.

Agreement Governing the Activities of States on the Moon - An agreement supplementing the Outer Space Treaty, and confirming the demilitarization of the Moon and other celestial bodies. Activities on the moon are limited to peaceful purposes. The agreement was opened for signature on December 18, 1979, and entered into force on July 11, 1984.

Air Defences - Weapon systems deployed to defend territory or troops from attack by aircraft, cruise or ballistic missiles.

A**ir Independent Propulsion Technology (AIP) -** A propulsion system that uses liquid (or compressed) oxygen or hydrogen fuel cells, thereby allowing submarines to stay submerged for longer periods without the need for external sources of oxygen.

Air-Launched Cruise Missile (ALCM) - A cruise missile designed to be launched from an aircraft and jet-engine powered throughout its flight. Its range is a function of payload, propulsion, and fuel volume, and can thus vary greatly. Under the START I Treaty, the term "long-range ALCM" means an air-launched cruise missile with a range in excess of 600 kilometres.

ALCM – Air-launched Cruise Missile

Allied Control Commissions - The Allied Control Commissions were administrative bodies set up in countries occupied by the Allies in 1945. They acted as *de facto* governments in those countries.

Alpha particle - A particle consisting of two protons plus two neutrons, emitted spontaneously from the nuclei of some radioactive elements. It is identical with a helium nucleus, having a mass of four units and an electric charge of two positive units. Alpha radiation is sometimes indicated by the Greek symbol α.

Al-Qaeda or Al-Qa'ida- A militant Islamist organisation, founded by Osama bin Laden in 1989. It became a significant agent of anti-Western terrorism in the post-Cold War world.

Angkar - A name describing the leadership or party machinery of the Khmer Rouge during its rule over Cambodia (1975-79).

Antarctic Treaty - Opened for signature on December 1, 1959, and entered into force on June 23, 1961. The Antarctic Treaty internationalizes and demilitarizes the Antarctic continent. It specifies that Antarctica be used for peaceful purposes only; all activities of a military nature, including testing of any type of weapon, are prohibited.

Anthrax - The common name of the bacterium *Bacillus anthracis*, as well as the name of the disease it causes. A zoonosis, meaning it is predominantly an animal disease but can also infect humans and cause death within days. *B. anthracis* bacteria can form spores, making them relatively easy to disseminate. Germany, the United Kingdom, the United States, and the USSR/Russia have all investigated anthrax as a biological weapon, as did the Japanese cult Aum Shinrikyo.

Anthrax Attacks - The 2001 mailing of a total of seven letters containing anthrax to several U.S. news outlets and the offices of two U.S. senators. These attacks killed five and sickened 17. The investigation of the attacks by an FBI-led task force is known as Amerithrax.

Anti-Ballistic Missile (ABM) Treaty - Signed by the United States and the Soviet Union on May 26, 1972, and entered into force on October 3, 1972, constrained strategic missile defences to a total of 200 launchers and interceptors per country, which were divided between two widely separated deployment areas. These restrictions were intended to prevent the establishment of a nationwide defence, and the creation of a base for deploying such a defence. The treaty was modified in 1974, reducing the permitted deployment areas to one per country. The United States withdrew in 2002.

Anti-Satellite Weapon (ASAT) - A system designed to destroy or disable enemy satellites in orbit.

ANZUS - A Cold War military alliance between Australia, New Zealand and the US. It was signed

in 1951. New Zealand was suspended from ANZUS in 1986, in part because it refused access to its ports for nuclear powered warships.

Apartheid - (Afrikaans for 'apartness'), a system of racial segregation used by the white Nationalist government in South Africa between 1948 and the 1990s. Apartheid allowed white South Africans to remain in government and affluence, by disenfranchising and excluding native Africans.

Apollo-Soyuz - First manned space flight conducted jointly by the United States and the Soviet Union during the era of *detente*. On July 17, 1975, the U.S. Apollo spacecraft and Soviet Soyuz vessel docked for two days of joint operations

Appeasement - The act of making concessions to an aggressive leader or power, in the hope it will make them less aggressive. Appeasement was viewed negatively during the Cold War because it had failed to halt Nazi expansion in 1938.

Arms control - Measures, typically bilateral or multilateral, taken to control or reduce weapon systems or armed forces.

Arms Control and Regional Security in the Middle East (ACRS) -The Madrid Peace Conference in October 1991 established a multilateral working group on Arms Control and Regional Security. The purpose of the ACRS was to complement bilateral negotiations between Israel and its immediate neighbours. The lack of universal membership in the region (neither Iran nor Iraq is a party to the ACRS), and complications in the peace process have hindered progress. The agreed measures have not been implemented, and the ACRS has not held a formal plenary meeting since September 1995.

Arms race - A period of competition or rivalry between two or more nations, focusing on the production of military technology and equipment. A significant feature of the Cold War. In particular a competitive build-up of nuclear weapons between the United States and Soviet Union that began after the Soviets exploded their first atomic weapon on August 29, 1949, ending the U.S. nuclear monopoly.

Arsenal - A collection of military equipment and weapons, including chemical, biological and nuclear materials and weapons.

Association of South East Asian Nations (ASEAN) - a regional organisation established on August 8, 1967, its objectives include the acceleration of economic growth and the promotion of regional peace and stability in Southeast Asia. It was established by five original member countries, but now consists of ten members and two observers.

Atlas - Intercontinental ballistic missiles (ICBMs), developed in the 1960s, they warehoused in deep underground concrete silos built to withstand a nuclear attack.

Atom - The smallest portion of an element that can combine chemically with other atoms.

Atom bomb - See nuclear weapon.

Atomic number - The number of protons in the nucleus of an atom, and hence the postion of an element in the periodic table. Symbol Z.

Atomic weight - The weighted mean of the masses of the neutral atoms of an element expressed in atomic weight units.

Atoms for Peace - A U.S. program announced by President Dwight D. Eisenhower at the United Nations on 8 December 1953 to share nuclear materials and technology for peaceful purposes with other countries. It ended abruptly in 1974 following India's first nuclear test.

Atto - Prefix meaning 10^{-18}.

Aum Shinrikyo - Japanese religious cult that attempted six failed biological attacks (five using

incorrectly produced botulinum toxin, and one using incorrectly produced anthrax), and 12 chemical attacks (five using sarin, five using VX, one using phosgene, and one using hydrogen cyanide) from 1990 to 1995. Their sarin attack on the Tokyo subway system, which killed 12 people and injured 1,039 people on 20 March 1995.

Average life (mean life) - The average of the individual lives of all the atoms of a particular radioactive substance. It is 1.443 times the radioactive half-life.

AVH - Allamvedelmi Hatosag, the state security police in communist Hungary.

Bb

B-1 - Strategic U.S. heavy bomber with nuclear capacity, developed in the 1980s; unlike the B-52, the B-1 is capable of flying intercontinental missions without refueling.

B-52 - Strategic U.S. heavy bomber with nuclear capacity, powered by eight turbojet engines; its range is extended by in-flight refueling. B-52s were the mainstay of U.S. nuclear forces in the 1950s.

Background radiation - Ionising radiation from naturally occurring radionuclides both in the environment (from soil, rock and building materials and from space - cosmic radiation) and in the body.

Baghdad Pact (aka CENTO) - A military alliance between Great Britain, Turkey, Iran, Iraq and Pakistan, signed in February 1955 would later include the United States, Iran and Pakistan. . It created what was later known as the Middle East Treaty Organisation (METO), the Central Treaty Organisation (CENTO) or the 'Middle East NATO'. Iraq withdrew from the Baghdad Pact in 1959, following a nationalist revolution there.

Baikonur Cosmodrome - Soviet missile-testing facility where rockets, spacecraft and satellites are launched; located in current-day Kazakhstan.

Ballistic missile A delivery vehicle powered by a liquid or solid fuelled rocket that primarily travels in a ballistic (free-fall) trajectory. The flight of a ballistic missile includes three phases:

1. boost phase, where the rocket generates thrust to launch the missile into flight;
2. mid-course phase, where the missile coasts in an arc under the influence of gravity;
3. terminal phase, in which the missile descends towards its target.

Ballistic Missile Defence (BMD) - System of defence based on the possession of ballistic missiles of any and all classes.

Baruch Plan: A U.S. initiative to outlaw nuclear weapons and to internationalize global stocks of fissile material for use in peaceful nuclear programs. After Bernard Baruch proposed the plan in 1946 at the United Nations, the United States and the Soviet Union held negotiations on the program but never reached agreement. It was based on the earlier Acheson-Lilienthal proposal.

Bay of Pigs - A beach in southern Cuba, approximately 95 miles (150 kilometres) from Havana. The Bay of Pigs became famous as the main landing point for a failed Bay of Pigs Landing area on Cuba's south coast where an American-organized invasion by Cuban exiles was defeated by Fidel Castro's government forces April 17-20, 1961.

Becquerel - The SI derived unit of radioactivity, the becquerel (Bq) is defined as the activity of a quantity of radioactive material in which one nucleus decays per second. The becquerel succeeded the curie (Ci), a previous non-SI unit based on the activity of 1 gram of radium-226. The curie was defined as 3.7×10^{10} decays per second, equivalent to 37GBq. See activity.

Berlin Airlift - A 1948-49 operation by the West, chiefly the USA and UK to circumvent the Berlin blockade (see below) by supplying West Berlin by air. The airlift was continued for 11 months .

During this time it delivered by air 2.3 million tons of supplies of food, fuel and supplies to the beleaguered city.

Berlin Ultimatum - Khrushchev's 1958 accusation that the western Allies had broken the Potsdam Agreement and that they should therefore leave Berlin in six months suggesting that Berlin should be turned into a neutral free city.

Beta particle - A particle, emitted by a radionuclide, with mass and charge equal in magnitude to an electron. The electric charge may be positive, in which case, the beta particle is called a positron. Beta radiation is sometimes indicated by the Greek symbol β.

Berlin blockade - East Germany's closure of land corridors to West Berlin in 1948-49. Instigated by Joseph Stalin and the Soviet Union, the East German regime attempted to starve the Allies out of West Berlin. The blockade was circumvented by the Berlin airlift (see above) and was lifted in May 1949.

Berlin Wall - A fortified perimeter, constructed around West Berlin in 1961. It was built to prevent the escape and defection of East Germans to the West. The Berlin Wall served as a powerful symbol of the Cold War and the Iron Curtain. It was breached by Berliners themselves in November 1989 and subsequently dismantled.

Big Three - Colloquial name for the Grand Alliance (the United States, Great Britain and the Soviet Union) of WWII or their three leaders (Roosevelt, Churchill and Stalin).

Bilateral - Negotiations, arrangements, agreements, or treaties that affect or are between two parties —and generally two countries.

Binary chemical weapon - A munition in which two or more relatively harmless chemical substances, held in separate containers, react when mixed or combined to produce a more toxic chemical agent.

Biological and Toxin Weapons Convention (BTWC) - The prohibits the development, production, or stockpiling of bacteriological and toxin weapons. Countries are required to destroy or divert to peaceful purposes all agents, toxins, weapons, equipment, and means of delivery within nine months after the entry into force of the convention. The BTWC was opened for signature on April 10, 1972, and entered into force on March 26, 1975.

Biological weapon (BW) – A weapon that uses microorganisms and natural toxins to produce disease in humans, animals, or plants. Biological weapons can be derived from: bacteria, viruses, rickettsia biological toxins and fungi. These agents can be deployed as biological weapons when paired with a delivery system, such as a missile or aerosol device.

Bizonia - Meaning 'two zones', was the name of the US and British zones of Germany after their merger in 1947. It became Trizonia in April 1949 after merging with the French zone.

Blister agent – Chemical warfare agent that causes victims to develop burns or blisters ("vesicles") on their skin, as well as eyes, lungs, and airway irritation.

Blockade - A military action, involving the surrounding or barricading of a port, island, city or nation, usually with military vessels. Its main purpose is to control, limit or prevent the movement of supplies.

Blood agent - Chemical warfare agent that enters the victim's blood and disrupts the body's use of oxygen.

Boiling water reactor - A type of light water nuclear reactor where the same loop of water serves as a moderator, a coolant for the core, and a steam source for the turbine.

Bolsheviks - Precursor to the Russian Communist Party, they seized power in Russia in October 1918 under Lenin's leadership.

Bomber -An aircraft carrying conventional or nuclear bombs, or conventionally or nuclear-armed cruise missiles, for use against ground or sea targets.

Bomber gap - In the 1950s a number of U.S. military officials warned about a "bomber gap," alleging the Soviet Union had more aircraft than the United States that were capable of delivering nuclear weapons. Later proven to be a fallacy.

Boost-phase - That part of a ballistic missile's flight path that begins at launch, during the boost phase, the booster and sustainer engines operate, and the warheads have not yet been deployed.

Boosted fission nuclear weapon - A type of nuclear weapon with a higher explosive yield than a regular fission weapon. A small amount of fusion fuel in the weapon increases the neutron flux, leading to a larger amount of the fissionable material undergoing fission, typically resulting in a higher yielding weapon.

Booster - The auxiliary part of a propulsion system of a missile that supplies the thrust during the launch and initial phase of a flight.

Botulinum Toxin – An exotoxin produced by the bacterium *Clostridium botulinum.* Botulinum toxin is the most toxic known substance. 15,000 times more toxic than VX nerve gas, mere nanograms of botulinum toxin will kill an adult human. A significant bioweapons concern.

Brandenburg Gate - A prominent landmark in Berlin. Once the main entrance to Berlin, it was closed after the construction of the Berlin Wall. President Reagan's 'Tear down this wall' speech was delivered on the western side of the Brandenburg Gate.

Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials (ABACC) – A bilateral safeguards agency established under an agreement between Argentina and Brazil to verify the exclusively peaceful use of nuclear energy in each country. The agreement establishing the agency was signed in Guadalajara, Mexico, on July 18, 1991.

Brezhnev Doctrine - A Soviet policy, outlined by Leonid Brezhnev in 1968. It argued that Moscow could intervene in the affairs of its satellite nations, to combat "forces hostile to socialism". It was used to justify the suppression of the Prague Spring in Czechoslovakia.

Brinkmanship - A political and/or military strategy. It involves taking aggressive, threatening or risky measures, in order to create pressure on another leader or government and force them to back down. The events of the Cuban missile crisis are often cited as an example of brinkmanship.

Broken arrow - Any incident that includes the seizure, theft, loss or accidental destruction of a nuclear device.

Cc

C2 - (Command & Control) - US DoD abbreviation.

C3 - (Command, Control & Communications) - US DoD abbreviation.

Cairo Declaration on the Denuclearization of Africa - Declaration at the first Assembly of Heads of States and Government of the Organization of African Unity (OAU) in Cairo in July 1964. The declaration called upon all states to respect the continent of Africa as a nuclear-weapon-free zone, and committed the African states to negotiate an international agreement, to be concluded under the auspices of the United Nations, not to manufacture or acquire nuclear weapons.

Cambridge Five (or Cambridge spy ring) - A name given to Cambridge University graduates who passed information or advice to the USSR between the 1930s and 1960s. The members of this group were Kim Philby, Guy Burgess, Anthony Blunt, Donald Maclean and John Cairncross.

Camp David - A retreat to the northwest of Washington, DC, that is used by the president of the United States. Two framework agreements providing for a peace treaty between Egypt and Israel,

and peace in the Middle East more broadly, were negotiated at Camp David and are known as the Camp David Accords.

Canberra Commission on the Elimination of Nuclear Weapons - Established by Australia in November 1995, the commission was created to develop ideas and propose practical steps to create a nuclear weapon-free world. On August 31, 1996, the Commission presented its findings to the Australian government, which then submitted the Canberra Report to the UN General Assembly and the Conference on Disarmament.

Capitalism - An economic system based on the private ownership of capital (land, resources and other means of production). It was the prevailing economic system in the US and other Western nations.

Carter Doctrine - A foreign policy adopted by President Carter in 1980. It pledged to protect American allies and interests in the Persian Gulf, using military force if necessary. It followed the Soviet invasion of Afghanistan and the Ayatollah Khomeini led revolution in Iran.

CCCP - (see USSR)

Center for Strategic and International Studies (CSIS) - "Center for Strategic and International Studies (CSIS) is a bipartisan, nonprofit policy research organization dedicated to providing "...strategic insights and policy solutions to help decisionmakers chart a course toward a better world."

CDC (Centers for Disease Control and Prevention) - The lead U.S. federal agency responsible for protecting the health and safety of American citizens at home and abroad, providing credible information to enhance health decisions, and promoting health through strong partnerships. The Office of Public Health Preparedness and Response is focused on minimizing the threat to health from terrorist acts, accidents, and chemical, biological and radiological threats.

CENTO - (see Baghdad Pact)

Central Intelligence Agency (CIA) - The CIA is an independent agency US responsible for providing national security intelligence to senior US policymakers.

Centrifuge - A device that performs isotope separation of gases. A centrifuge relies on the principles of centrifugal force accelerating molecules so that particles of different masses are physically separated in a gradient along the radius of a rotating container. The gas centrifuge was developed to replace the gaseous diffusion method of uranium-235 extraction.

CFE - Conventional Forces in Europe treaty, signed November 19, 1990, by leaders of all NATO and Warsaw Pact countries; it reduced troop levels and the number of non-nuclear weapons in Europe.

Chain reaction (fission) - A process in which neutrons are absorbed by fissionable material and the neutrons released as a result of fission go on to cause more fissions.

Challenge inspection - An inspection triggered by a suspected violation of a treaty or agreement. The inclusion of this type of provision in an agreement increases the likelihood of detecting weapons at sites not declared in the data exchanged under the agreement.

Charged particle - A particle with a positive or negative electric charge.

Charter 77 - The main dissident group in Czechoslovakia formed on January 6 1977 called on the socialist government to respect human rights. 230 intellectuals published a human rights manifesto in Western newspapers.

Checkpoint Charlie - The most prominent gateway on Berlin Wall. It was the location of several dramatic incidents during the Cold War, including a stand-off between US and Soviet tanks in October 1961.

Chemical Agent Precursor - Any chemical reactant which takes part at any stage in the production by whatever method of a chemical warfare agent. This includes any key component of a binary or multi-component chemical system. Common precursors to toxic chemicals are listed alongside the agents in the OPCW Schedules of Chemicals. Many precursors controlled through non-proliferation initiatives also have legitimate commercial uses.

Chemical Weapon (CW) - The Organization for the Prohibition of Chemical Weapons defines a chemical weapon as any of the following:

1.a toxic chemical or its precursors;

2.a munition specifically designed to deliver a toxic chemical;

3.any equipment specifically designed for use with toxic chemicals or munitions.

Toxic chemical agents may be gaseous, liquid, or solid chemical substances that use their toxic properties to cause death or severe harm to humans, animals, and/or plants.

Chemical Weapons Convention (CWC) - The Chemical Weapons Convention requires each state party to declare and destroy all the chemical weapons (CW) and CW production facilities it possesses, or that are located in any place under its jurisdiction or control, as well as any CW it abandoned on the territory of another state. The CWC was opened for signature on 13 January 1993, and entered into force on 29 April 1997.

Choking agent - A chemical weapon which attacks lung tissue when inhaled, leading to respiratory failure. Choking agents cannot be absorbed through the skin and generally do not cause external injuries.

CIA - Central Intelligence Agency, established in 1947 by President Harry S.Truman; conducts U.S. intelligence and counter-intelligence missions overseas.

Circular Error Probable - An indicator of a weapon system's accuracy, measured as the radius of the circle in which ½ of all warheads fired at a target will fall.

Civil defence - Plans and strategies designed to protect civilians during an emergency, short of military action. During the Cold War, most civil defence systems plans were designed to protect civilians from nuclear attack.

Civil Defence Corps - The Civil Defence Corps was a UK organisation, largely manned by volunteers, formed in 1949 and disbanded in 1968.

Civil rights movement - Movement for political, social and economic equality by African Americans during the 1960s, mostly in the segregated cities of the Southern United States.

Cloud column - The visible column of weapon debris including dust and water droplets extending upward from the point of burst of a nuclear (or atomic) weapon.

Collective dose - Frequently used for collective effective dose equivalent.

Collective effective dose equivalent - The quantity obtained by multiplying the average effective dose equivalent by the numbers of persons exposed to a given source of radiation. Expressed in man-sievert, symbol man-Sv. Frequently abbreviated to collective dose.

Colony -

1.A nation or territory ruled or dominated by a more powerful nation, under the doctrine of imperialism. There were dozens of colonies at the start of the Cold War, chiefly in Africa and Asia. Many of these colonies obtained independence and self-government during the Cold War.

2.In bacteriology a cluster of organisms formed on solid culture media. Each distinct colony represents an individual bacterial cell or group that has divided repeatedly. Being kept in one

place, the resulting cells accumulate to form a visible patch. Most bacterial colonies appear white or a creamy yellow in colour, and are fairly circular in shape.

COMECON - Council of Mutual Economic Assistance, a Soviet-run council that facilitated trade, economic, technical and scientific cooperation between Soviet bloc nations plus a number of other communist states. It was formed in 1949 and disbanded in 1991. It was a Soviet version of an economic community. Moscow's answer to the Marshall Plan.

COMINFORM - Acronym for the Communist Information Bureau, a committee of delegates from communist countries that met between 1947 and 1956. One function of COMINFORM was to ensure conformity, unity and compliance between Soviet bloc governments. Dissolved by Khrushchev in 1956.

COMINTERN - An acronym for the Communist International, a committee of delegates from communist parties around the world. The COMINTERN met regularly in Moscow between 1919 and its dissolution in 1943. Its main function was to expand communism by assisting communist movements with tactical direction and support.

Command, control, communication and intelligence (C3I) - The integrated combinations of military command information processing, communications network, and intelligence gathering subsystems (including surveillance, warning, and identification subsystems). These combined technologies are designed to provide timely and adequate data required to plan, direct, and control military forces and operations. Sometimes referred to as C4I when “computers” are included.

Commonwealth of Independent States - A confederation of 11 former Soviet bloc countries, including Russia. It was formed in December 1991 after the dissolution of the Soviet Union.

Communism - A political and economic ideology, based on the writings of 19th-century philosopher Karl Marx. Communism strives for a society with no large government, economic classes or exploitation of workers.

Communist Party of the Soviet Union (CPSU) - The governing party of the Soviet Union for the duration of the Cold War. It was also the only legally permitted political party in the USSR.

Comprehensive Nuclear Test Ban Treaty (CNTBT) - A multilateral treaty that bans all nuclear explosions, for both civilian and military purposes, in all environments. It was adopted by the United Nations General Assembly on 10 September 1996, but has not entered into force, as eight states have not ratified the treaty.

Comprehensive Safeguards Agreement - Legally-binding agreement between the International Atomic Energy Agency (IAEA) and a non-nuclear weapon state party to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), concluded as a condition of membership in the Treaty. Comprehensive Safeguards Agreements allow and oblige the IAEA to ensure that all nuclear material and nuclear activities in a state are peaceful and not diverted to nuclear weapons.

CONELRAD - A civil radio alert system used in the early '50s to the '60s in the USA. In the event of attack people were expected to tune their radios to the nationwide Conelrad frequencies, 640 or 1240 kHz AM to receive information. AM radios of that era had tiny triangles or CD symbols on their dials marking the dial positions of Conelrad stations. Later replaced by the Emergency Broadcast System.

Conference on Disarmament (CD) - An international forum focused on multilateral disarmament efforts. Although it reports to the UN General Assembly and has a relationship with the United Nations, it adopts its own rules of procedure and agenda, giving it some degree of independence. The CD has a permanent agenda devoted to the negotiation of disarmament issues.

Confidence- (and Security-) Building Measures (CSBMs) - Tools that states can use to reduce tensions and avert the possibility of military conflict. Such tools include information, communication, constraints, notification , and access measures. CSBMs normally precede the

negotiation of formal arms control agreements or are added to arms control agreements to strengthen them.

Congress - US parliament consisting of the Senate and House of Representatives.

Conscription - Compulsory military service, required of civilians during times of war or emergency, it was common during the Cold War. In the United States it is known as the "draft". In the UK it took the form of National Service ending in 1963.

Containment - A Cold War policy that aimed to restrict communist expansion. The policy was established by the Truman administration in 1947 to contain Soviet influence to what it was at the end of World War II.

Containment structure - An enclosure built around a nuclear reactor to confine fission products that otherwise might be released into the atmosphere in the event of an accident.

Contamination -

- The suspension in air or deposition of radionuclides, biological or chemical warfare agents upon, or in, the ground, water and other surfaces, and personnel and equipment
- External contamination of a person or equipment - deposition, general or localised, of radionuclides, biological or chemical warfare agents upon all or any of clothing, hair, skin and/or equipment
- Internal contamination of a person - deposition within the body, usually by inspiration, by ingestion or sometimes through penetration of (usually broken) skin by radionuclides, biological or chemical warfare agents which will then affect the cells of surrounding body tissues.

Contras - U.S.-backed counter-revolutionary forces opposed to Nicaragua's leftist Sandinista government, which came to power in 1979.

Convention for the Suppression of the Financing of Terrorism (CSFT) – The CSFT requires each State party to take appropriate measures, in accordance with its domestic legal principles, for the detection and freezing, seizure or forfeiture of any funds used or allocated for the purposes of committing acts of terrorism. The Convention was adopted by the General Assembly of the United Nations on December 9, 1999 and entered into force on 10 April 2002.

Convention on Nuclear Safety (CNS) - The CNS commits states operating nuclear power plants to establish and maintain a regulatory framework to govern the safety of nuclear installations. The Convention was adopted in 1994.

Convention on the Physical Protection of Nuclear Material (CPPNM) - The CPPNM:

1. Obliges parties to ensure that during international transport across their territory, or on ships or aircraft under their jurisdiction, civil nuclear materials are protected according to agreed standards.
2. Provides a framework for international cooperation on the protection, recovery, and return of stolen nuclear material,
3. Provides for the application of criminal sanctions against persons who commit crimes involving nuclear material.

The CPPNM opened for signature on 3 March 1980 and entered into force on 8 February 1987.

Conventional Armed Forces in Europe Treaty (CFE) - Agreement signed in November 1990 to reduce the number of tanks, missiles, aircraft and other non-nuclear military hardware held by those countries that signed the Treaty. It was signed by representatives from both NATO and the Warsaw Pact.

Conventional warfare or weapons - Conventional weapons are weapons that do not require nuclear energy for either propulsion or explosive power and do not deliver chemical or biological agents.

Cooperative Threat Reduction (Nunn-Lugar) Program - U.S. Department of Defense (DOD) program established in 1992 through legislation sponsored primarily by Senators Sam Nunn and Richard Lugar.

The program has focused primarily on:

1.destroying vehicles for delivering nuclear weapons, their launchers , and their related facilities;

2.securing former Soviet nuclear weapons and their components;

3.destroying Russian chemical weapons.

The term is often used generically to refer to all U.S. non-proliferation programmes in the former Soviet Union—and sometimes beyond, including those implemented by the U.S. Departments of Energy, Commerce, and State.

Coordinating Committee for Multilateral Export Controls (COCOM) - Organization established in 1949 to restrict the sale of goods to Warsaw Pact countries. Its 17 members included Japan and all of the NATO countries except Iceland. Following the end of the Cold War, many of COCOM's restrictions on Eastern Europe were lifted. COCOM ceased to exist in 1994, it was superseded by the Wassenaar Arrangement on Export Controls for Conventional Arms and Duel-Use Goods and Technologies

Core - The central part of a nuclear reactor where nuclear fission occurs. It contains the fuel, control rods, moderator, coolant, and support structures.

Corrective Revolution - A significant shift in policy, ordered by Egyptian leader Anwar Sadat in May 1971. It sought to purge Egypt's government of Soviet influence, dismissing pro-Soviet politicians and officials, and expelling 20,000 Soviet advisors from the country. By the late 1970s, Egypt was aligned with the US and receiving American aid.

Cosmic rays - High-energy ionising radiation from outer space.

Counterforce targeting - War planning that envisions strikes on an enemy's military and industrial targets.

Countervalue targeting - War planning that envisions strikes on an enemy's civilian population centres.

Coup d'etat - A seizure of power or government by a group of military officers. There were numerous Cold War *coup d'etats*, for example in Brazil (1964) and Chile (1973). Frequently abbreviated to coup.

Crater - The pit, depression, or cavity formed in the surface of the Earth by a surface or underground explosion. Crater formation can occur by vapourisation of the surface material, by the scouring effect of air blast, by throw-out of disturbed material, or by subsidence. In general, the way in which the crater is formed changes from one to the next with increasing depth of burst. The apparent crater is the depression which is seen after the burst. It is smaller than the true crater because it is covered with a layer of loose earth, rock etc.

Critical - A state where the number of neutrons in each period of time, or generation, remains constant.

Critical infrastructure - According to U.S. Presidential Decision Directive-63 of May 1998, critical infrastructure is defined as "*those physical and cyber-based systems essential to the minimum operations of the economy and government."*

Cruise missile - Winged missile used against terrestrial targets that remains in the atmosphere and flies the major portion of its flight path at approximately constant speed. Cruise missiles are designed to deliver a large warhead over long distances with high precision, using onboard guidance.

Cuban Missile Crisis - Thirteen day period of international tension in October 1962 when the world stood at the brink of nuclear war, after the Soviet Union placed nuclear weapons on Cuba and the United States responded with a blockade of the island on October 22. The Soviets agreed six days later to withdraw the weapons.

Cultural Revolution - Mass campaign in China ordered by Mao Tse-tung in 1966, aimed at renewing popular support for revolutionary communism; the nation nearly fell into civil war as so-called bourgeois elements in cultural circles and the government were purged.

Curie (Ci) - Obsolete unit of radioactive activity. The curie was defined as $3.7x10^{10}$ decays per second.

Cyber warfare - A computer or network-based conflict involving politically motivated attacks by a nation-state on another nation-state. In these types of attacks, nation-state actors attempt to disrupt the activities of organizations or nation-states, especially for strategic or military purposes and cyber-espionage

Dd

De-activate - To remove a weapon from operational status for an indefinite period.

De-alert - To reduce the level of readiness to launch of nuclear weapons systems. Measures include removing nuclear warheads from missiles, and storing the warheads separately from the missiles.

De-targeting - Removing the targeting information from, a ballistic missile, in order to reduce the consequences of an accidental or unintentional launch. De-targeting cannot be verified, and missiles can be rapidly re-targeted.

Decay - The spontaneous transformation of a radionuclide. The decrease in the activity of a radioactive substance.

Decay product - A nuclide or radionuclide produced by decay. It may be formed directly from a radionuclide or as a result of a series of successive decays through several radionuclides.

Decontamination - The reduction or removal of radioactive material, chemical or biological agent from a structure, area, object, or person. Decontamination measures include: treating the surface to remove or decrease the contamination; letting the material stand so that the radioactivity decreases over time as a result of natural radioactive decay; or covering the contamination to shield or attenuate the radiation emitted.

DEFCON - An American military acronym for “defence readiness condition”. It ranges from DEFCON 5 (a low state of readiness) to DEFCON 1 (imminent nuclear war). The highest state of alert during the Cold War was DEFCON 2, ordered for American air forces during the Cuban missile crisis.

De-militarisation - Removing all armed forces and military weapons from an area, in the case of weapons or other physical assets, often destroying them.

De-Nazification - The eradication of Nazis and Nazi values from German government, bureaucracy, society and culture after World War II.

Depleted uranium -Uranium in which the content of the isotope uranium-235 has been decreased. Refers to a decrease below the natural value of 0.7% by weight or to a decrease below the desired content in enriched uranium.

Deployment - Distribution of armed forces in a specific area.

De-Stalinisation - Elimination of all influence of Joseph Stalin after he died. Khrushchev wanted to remove all images of Stalin which were all over Easter Europe. In the streets of these countries, statues of Stalin were toppled and destroyed to erase the bad memories of his excesses.

Design Basis Threat (DBT) – DBT is defined by the U.S. Nuclear Regulatory Commission as the "*profile of the type, composition, and capabilities of an adversary."*

Détente - A term meaning "relaxed tensions". It refers to a state of improved relations after a period of conflict or tension. In the Cold War, *détente* describes the decade-long 'thaw' in US-Soviet and US-Chinese relations in the late 1960s and late 1970s. Détente was highlighted by the signing of the Strategic Arms Limitation Talks (SALT) treaty and the Helsinki Accords.

Deterrence - The actions of a state or group of states to dissuade a potential adversary from initiating an attack or conflict through the credible threat of retaliation.

Dien Bien Phu - Site of a French military garrison near Hanoi -where the French colonials were defeated by Vietnamese independence fighters on May 7, 1954.

Diffusion - A technique for uranium enrichment in which the lighter Uranium 235 isotope molecules in Uranium hexafluoride (UF_6) gas move through a porous barrier more rapidly than the heavier Uranium 238 isotopes.

Dirty bomb - An informal term for a radiological dispersal device (RDD), a device pairing conventional explosives with radiological materials. Once detonated, the conventional explosives disperse the radioactive material, contaminating the target area.

Dismantlement - Taking apart a weapon, facility, or other item so that it is no longer functional.

Diversion - The clandestine removal or appropriation of materials or technologies for use in projects or weapons programs that violate either a state's treaty obligations or an end use agreement reached between the state and the country from which the material or technology originated.

DMZ - Demilitarized zone between North and South Korea since 1953, when the Korean War ended. It is one of the most heavily fortified borders in the world, often described as the last frontier of the Cold War.

DNA. Deoxyribonucleic acid - The compound that controls the structure and function of cells and is the material of inheritance.

Doctrine of nuclear deterrence - The belief that maintaining a large nuclear arsenal will prevent other nations from attacking you, for fear of nuclear retaliation.

Domino Theory - An anti-communist theory that was prevalent in Western nations during the Cold War. It contends that the rise of communism in one country would lead to it spreading to neighbouring countries, particularly in Asia.

Dose - General term for quantity of radiation. The amount of ionising radiation received, as deduced from the energy absorbed from an extemal radiation source. See absorbed dose, dose equivalent, effective dose equivalent, collective effective dose equivalent. Frequently used for effective dose equivalent.

Dose equivalent - The quantity obtained by multiplying the absorbed dose by a factor to allow for the different effectiveness of the various ionising radiations in causing harm to tissue. Unit sievert, symbol Sv. The factor for gamma rays, X-rays, and beta particles is l, for neutrons 10, and for alpha particles 20.

Dosemeter or dosimeter - A small device worn on the person to measure absorbed energy and from which a record of Absorbed Dose may be obtained.

Dosimetry - The estimating, recording and maintaining of records of dose.

Dual-use item - An item that has both civilian and military applications. For example, many of the precursor chemicals used in the manufacture of chemical weapons have legitimate civilian industrial uses.

Duck and Cover - A civil defence slogan and campaign, used in the US in the 1950s and early 1960s. It was used to teach American civilians, particularly children, how to protect themselves in the event of a nuclear attack.

Dynamic pressure - The air pressure that results from the mass air flow (or wind) behind the shock front of a blast wave. It is equal to the product of half the density of the air through which the blast wave passes and the square of the particle velocity behind the shock front as it impinges on the object or structure. The unit of pressure is the Pascal. The Royal Observer Corps "Bomb Power Indicator" measure dynamic overpressure to give a measure of bomb power.

Ee

Eastern Bloc - the former Communist states of Eastern and Central Europe, including the countries of the Warsaw Pact, along with Yugoslavia and Albania, which were not aligned with the Soviet Union after 1948 and 1960.

Effective dose equivalent - The quantity obtained by multiplying the dose equivalents to various tissues and organs by the risk weighting factor appropriate to each and summing the products. Expressed in sieverts, symbol Sv. Frequently abbreviated to dose.

Eighteen-Nation Disarmament Committee (ENDC) - The predecessor to the UN Conference on Disarmament in Geneva, the ENDC existed from 1962 to 1968, it hosted most of the negotiations concerning the NPT text. The ENDC consisted of five Western countries, five Eastern (Soviet bloc) countries, and eight non-aligned countries, with the United States and Soviet Union as co-chairs.

Eisenhower Doctrine - A Pledge by US President Eisenhower in 1957 to provide military and economic aid to any Middle Eastern country fighting communism.

Electrical interaction - A force of repulsion acting between electric charges of like sign and a force of attraction acting between electric charges of unlike sign.

Electromagnetic Pulse (EMP) - A sharp pulse of radio frequency electromagnetic radiation produced when an explosion occurs in an unsymmetrical environment. The intense electric and magnetic fields can damage unprotected electrical and electronic equipment over a large area.

Electron - An elementary particle with low mass, 1/1836 that of a proton, and with unit negative electric charge. Positively-charged electrons, called positrons, also exist. See beta particle.

Electron volt - Unit of energy employed in radiation physics. Equivalent to the energy gained by an electron in passing through a potential difference of 1 volt. Symbol eV. 1 eV = 1.6×10^{-19} joule approximately.

Element - A substance with atoms all of the same atomic number - meaning they have the same number of protons in the atoms.

Emitter - A radionuclide decays by emission of certain radioactive particles and/or electromagnetic radiation. A particular radionuclide may be described as an alpha or beta or beta/ gamma emitter.

Enriched uranium - Uranium in which the content of the isotope uranium-235 has been increased above its natural value of 0.7% by weight.

Equivalent dose - The quantity obtained by multiplying the absorbed dose by a factor to allow for the different effectiveness of the various ionising radiations in causing harm to tissue. Unit is the sievert, symbol Sv.

Espionage - The practice of obtaining secret information or advancing government policy through

covert means. It is usually carried out by spies or agents using covert methods.

European Atomic Energy Community (Euratom) - Launched in 1958 to facilitate the development of nuclear energy for peaceful purposes within the European Community.

European Defence Community (EDC) - A proposed military alliance between France, Italy, West Germany, Belgium, the Netherlands and Luxembourg. A treaty establishing the EDC was signed in May 1952, however, the French parliament refused to ratify and the EDC never came into effect.

(European) Phased Adaptive Approach (EPAA) - Approach to the organization of ballistic missile defense efforts in Europe was announced by U.S. President Barack Obama's administration in September 2009. It originally envisioned four phases of technological development and deployment between 2011 and 2020. The fourth phase has not been implemented. The EPAA is reliant on sea-based Aegis cruisers with SM-3 interceptors and land-based SM-3 interceptor technology. At the 2010 Lisbon summit, NATO formally endorsed the EPAA.

Euro-Atlantic Partnership Council (EAPC) - Succeeded the North Atlantic Cooperation Council, and brought together the 26 NATO allies and 20 partners in a forum providing for regular consultation and cooperation. The EAPC meets periodically at the level of ambassadors and foreign and defence ministers; when appropriate, heads of state and government of the 49 members also meet.

Evil empire - Phrase used by Ronald Reagan in 1983 to describe the Soviet bloc. Many considered Reagan’s choice of words to be provocative and inflammatory.

Excitation - A process by which radiation imparts energy to an atom or molecule without causing ionisation. Dissipated as heat in tissue.

EXCOMM - Abbreviation for Executive Committee, a group of politicians, defence personnel and advisors assembled by President John F Kennedy during the 1962 Cuban missile crisis, it met twice formally, but had existed in an unofficial form for some time.

Export control - National laws or international arrangements established to restrict the sale of certain goods to certain countries, or to ensure that safeguards or end-use guarantees are applied to the export and sale of sensitive and dual-use technologies and materials.

Extended deterrence - A country protected from potential adversaries by the nuclear weapons’ backed security guarantee of an ally is said to be under an extended deterrence nuclear umbrella.

Ff

Fall-out - The transfer of radionuclides produced by nuclear weapons from the atmosphere to Earth. The process or phenomenon of the descent to the Earth's surface of particles contaminated with radioactive material from the radioactive cloud. The term is also applied in a collective sense to the contaminated particulate matter itself. The early (or local) fall- out is defined, somewhat arbitrarily, as those particles which reach the Earth within 24 hours after a nuclear explosion. The delayed (or worldwide) fall-out consists of the smaller particles that ascend into the upper troposphere and into the stratosphere and are carried by winds to all parts of the Earth. The delayed fall-out is brought down to Earth, mainly by rain and snow, over extended periods ranging days to years.

Fallout shelter - A secure building or chamber, often located underground, designed to protect inhabitants from fallout following a nuclear attack.

Fast neutrons - Conventionally neutrons with energies in excess of 0.1 MeV. Corresponding velocity about 4,000km/s.

Fast breeder reactors – Reactors designed to produce more fissile material than they consume. The surplus fissile material is produced by surrounding the core of the reactor with a blanket of

fertile U-238, which is transmuted to plutonium (Pu-239). The same underlying fast reactor technology can be used to burn (or consume) plutonium and other actinides, such as americium and neptunium. Such reactors are known as fast burner reactors.

Federal Bureau of Investigation (or FBI) - An American civilian law enforcement body, formed in 1908 and overseen by J. Edgar Hoover until 1972. It is responsible for investigating and prosecuting federal crimes and protecting domestic security. The FBI was responsible for investigating and prosecuting Cold War threats, including espionage and subversive political activity.

Federal Emergency Management Agency (FEMA) - A U.S. federal agency that can be called upon to help when the president declares a disaster. The governor of the state in question must request assistance from the president before FEMA can respond. Disasters are "declared" after hurricanes, tornadoes, floods, earthquakes, or other similar events strike a community. In 2003, FEMA became a part of the Department of Homeland Security.

Federal Republic of Germany - The formal title of West Germany between 1949 and 1990. It was aligned with the US and other Western nations during the Cold War. West Germany was granted membership of NATO in 1955 and the United Nations in 1973.

Fire storms - Stationary mass fires, generally in built-up urban areas, causing strong, in-rushing winds from all sides; the winds keep the fires from spreading while adding fresh oxygen to increase their intensity.

First responders - Emergency personnel who are the first to arrive at the scene of an incident, including firefighters, police, and emergency medical technicians (EMTs).

First strike - The ability of one nation to launch a pre-emptive or surprise attack on another, thus giving them a significant advantage.

Fissile isotope – An Isotope capable of undergoing fission by absorbing neutrons at any energy, including low energies (also referred to as “thermal” energies). Uranium-233, Uranium-235, and Plutonium-239 are all fissile isotopes.

Fissile material - A type of fissionable material capable of sustaining a chain reaction by undergoing fission upon the absorption of low-energy (or thermal) neutrons. Uranium-235, Plutonium-239, and Uranium-233 are fissile materials for peaceful and nuclear weapons purposes.

Fissile Material Cut-off Treaty (FMCT) – Treaty currently under discussion in the Conference on Disarmament (CD) to end the production of weapons-usable fissile material (highly enriched uranium and plutonium) for nuclear weapons.

Fission - Nuclear fission. A process in which a nucleus splits into two or more nuclei and energy is released. Frequently refers to the splitting of a nucleus of uranium-235 into two approximately equal parts by a thermal neutron with emission of other neutrons.

Fission bomb - A nuclear bomb based on the concept of releasing energy through the fission (splitting) of heavy isotopes, such as Uranium-235 or Plutonium-239.

Fission products - A general term for the complex mixture of substances produced as a result of nuclear fission. A distinction should be made between these and the direct fission products of fission fragments that are formed by the actual splitting of the heavy-element nuclei. Something like 80 different fission fragments result from roughly 40 different modes of fission of a given nuclear species (e.g., uranium-235 or plutonium-239). The fission fragments, being radioactive, immediately begin to decay, forming additional (daughter) products, with the result that the complex mixture of fission products so formed contains over 300 different isotopes of 36 elements.

Fleet ballistic missile submarine (SSBN) - A nuclear-powered submarine designed to deliver ballistic missile attacks against assigned targets from either a submerged or surfaced condition.

Flexible response - U.S. policy of maintaining both conventional and nuclear forces to have flexibility in dealing with communist threats.

FNLA National Front for the Liberation of Angola - A U.S.-backed faction that fought against the Soviet-backed MPLA for control of Angola after the Portuguese withdrew in 1975.

Force structure - The configuration of a country's nuclear or conventional forces. For example, in the United States and Russia, nuclear forces are structured in a triad, with nuclear warheads deployed on bombers, land-based missiles, and sea-based missiles.

Foreign policy (or Foreign affairs) - A government's attitude, position and actions with regard to other nations. Foreign policy takes in areas such as diplomacy, alliances, trade, sanctions, military alliances or intervention.

Free radical - A grouping of atoms that normally exists in combination with other atoms, but can sometimes exist independently. Generally very reactive chemically.

Full-scope safeguards - Refers to a set of measures implemented by the International Atomic Energy Agency to detect, in a timely manner, the diversion of a significant quantity of nuclear material by monitoring various stages in the nuclear fuel cycle of a non-nuclear weapon state.

Fundamentalism - An approach to religious observance that favours a literalist or extreme interpretation of, and strict adherence to, a religion's core texts. This approach is often combined with religiously justified political agendas which because they are divinely inspired, are not subject to negotiation or discussion. Fundamentalism is not specific to any single religion, and fundamentalist movements can be found within Islam, Hinduism, Christianity, and Judaism among other religions.

Fusion or Thermonuclear fusion - A process in which two or more light nuclei are formed into a heavier nucleus and energy is released.

Gg

G-8 Global Partnership Against the Spread of Weapons of Mass Destruction - Launched in 2002 at the G-8 Summit in Kananaskis, the G-8 Global Partnership is a multilateral initiative for financial commitments to implement and coordinate chemical, biological, and nuclear threat reduction activities on a global scale.

Gamma rays (or radiation) - Electromagnetic radiations of high photon energy, without mass or charge, propagated as a wave, originating in atomic nuclei and accompanying many nuclear reactions e.g., fission, radioactivity, and neutron capture. Physically, gamma rays are identical with X-rays of high energy, the only essential difference being that X-rays do not originate from atomic nuclei but are produced in other ways (e.g. by slowing down fast electrons of high energy). Gamma rays are sometimes indicated by the Greek symbol γ.

Geiger tube - (Strictly speaking a Geiger-Muller tube). A glass or metal envelope containing a gas at low pressure and two electrodes, in the case of metal envelopes they commonly form one electrode. Ionising radiation causes discharges, which are registered as electric pulses in a counter. The number of pulses is related to dose. Tubes designed to detect alpha radiation have a very thin window, commonly of mica. Tubes for gamma only have a thick wall, and those for gamma and beta have a wall of intermediate thickness.

Geneva Agreement - Signed by the Soviet Union, United States, Afghanistan and Pakistan in 1988, it called on the Soviets to withdraw their troops from Afghanistan by February 1989.

Geneva Conference on Indochina - April 1954, established a North and South Vietnam, with a border along the 17th parallel, following the defeat of French colonial forces at Dien Bien Phu.

Geneva Protocol - Formally known as the Protocol for the Prohibition of the Use in War of

Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, this protocol prohibits the use in war of asphyxiating, poisonous, or other gases, and bans bacteriological warfare. It was opened for signature on 17 June 1925.

German *Détente* - This term is sometimes used to describe *Ostpolitik*, the policy of good relations implemented by West German leader Willy Brandt in the early 1970s. German Democratic Republic (GDR or DDR) - The formal title of East Germany between 1949 and 1990. East Germany was a member of the Soviet bloc during the Cold War. It became a member of the Warsaw Pact in 1955 and the United Nations in 1973.

Glasnost - Russian word meaning 'openness'. It refers to a series of Soviet reforms, implemented by Mikhail Gorbachev during the late 1980s. The *glasnost* reforms encouraged open debate, discussion and freedom of speech.

GLCM – Ground Launched Cruise Missile.

Global Health Security Agenda - A multilateral initiative of a subset of World Health Organization member states to strengthen national and global capacities to detect and prevent the spread of infectious disease, whether natural or deliberate.

Global Initiative to Combat Nuclear Terrorism (GICNT) - The GICNT was announced by U.S. President George W. Bush and Russian President Vladimir Putin on 15 July 2006 in St. Petersburg, Russia. The initiative's missions is to strengthen global capacity to prevent, detect, and respond to nuclear terrorism by conducting multilateral activities that strengthen the plans, policies, procedures, and interoperability of partner nations.

Global Strike Mission - A mission assigned to U.S. STRATCOM in 2003 aimed at providing the President of the United States with the option to order pre-emptive military strikes against high-value and mobile WMD targets with conventional or nuclear weapons.

Global Threat Reduction Initiative (GTRI) - A program established by the U.S. National Nuclear Security Administration in 2004 to identify, secure, remove, and/or facilitate the removal of vulnerable nuclear and radiological materials around the world.

Grand Alliance - A alliance between the US, Britain and the Soviet Union during the Second World War.

Gray - A derived unit of ionising radiation dose in the International System of Units (SI). Defined as the absorption of one joule of radiation energy per kilogram of matter. Symbol: Gy.

Great Leap Forward - Chinese economic plan launched by Mao Zedong in 1958 that included farm collectivization and state-sponsored industrialization. It caused massive famine in the early 1960s.

Great Society - A U.S. domestic social program initiated by President Johnson in the 1960s that included civil rights legislation, improved health care and a general "war on poverty."

Grepo (Grenzpolizei) - East German border police. They were responsible for guarding the Berlin Wall and other national borders.

Ground Based Interceptor (GBI) - The ground-based missile intercept of the National Missile Defense (NMD) system proposed by the George W. Bush administration, the GBI would intercept incoming ballistic missile warheads outside the earth's atmosphere (exo-atmospheric) and collide with the incoming ballistic missile, thereby destroying the missile. The GBI would consist of a multi-stage solid propellant booster and an exo-atmospheric kill vehicle.

Guerrilla - Someone who fights in a rebel army, usually against an establish army.

Guerrilla tactics - The use of ambushes, raids, sabotage and hit and run by a smaller group of combatants against larger more established military forces.

Guerrilla War - Fighting in small groups against conventional forces, using raid , sabotage or ambush tactics.

Gulags - Soviet prison and labour camps, used mainly during and after the Stalinist era. They were used to isolate and punish political prisoners, career criminals and other undesirables. The gulags were officially closed in 1960, but forced labour camps continued to operate.

Gun-type (nuclear) weapon - A device in which two or more pieces of fissionable material, each smaller than a critical mass, are brought together very rapidly so as to form a supercritical mass which can explode as the result of a rapidly expanding fission chain reaction.

Hh

Hague Code of Conduct against Ballistic Missile Proliferation (HCOC) - Formerly known as The International Code of Conduct (ICOC), HCOC was adopted in 2002. The HCOC was established to bolster efforts to curb ballistic missile proliferation worldwide and to further delegitimize such proliferation by fostering consensus among states on how they should conduct their trade in missiles and dual-use items.

Half-life - The time in which one half of the atoms of a particular radioactive substance decay. Measured half-lives vary from millionths of a second to billions of years, depending on the isotope.

Hallstein Doctrine - A West Germany foreign policy, outlined in December 1955. It ruled that West Germany would not maintain diplomatic relations with any nation that formally recognised East Germany. It was later used to cut ties with Yugoslavia and Cuba.

Height of Burst (HOB) - The height above the Earth's surface at which a bomb is detonated in the air.

Helsinki Accords - A multilateral agreement signed in 1975. They aimed to improve communications and relationships between Soviet bloc and Western countries and that the countries would respect their citizens' human rights and freedoms. The accords were signed by all the countries of Europe (except Albania, which became a signatory in September 1991) and by the United States and Canada.

Hemorrhagic fever viruses - A group of viruses that cause characteristic hemorrhaging resulting from damage to the vascular system and impairment of bodily regulation. The diseases caused by hemorrhagic fever viruses include Marburg, Ebola, Yellow fever, and Lassa fever. The Soviet Union weaponized several hemorrhagic fever viruses including Marburg, Ebola, Lassa, and the New World arenaviruses Junin and Machupo. The United States weaponized Yellow fever and Rift Valley fever. North Korea may have also weaponized hemorrhagic fever viruses.

HEU deal - The United States and Russia concluded the Highly Enriched Uranium (HEU) Purchase Agreement in 1993. Under the terms of the agreement, the United States would purchase 500 tons of HEU over a 20-year period from the former Soviet weapons program, dilute it to low-enriched uranium, and sell it as fuel for nuclear power plants on the commercial market. The HEU Deal is also referred to as the "Megatons to Megawatts" program.

Hibakusha - Term widely used in Japan to refer to survivors of the World War II atomic bombings of Hiroshima and Nagasaki. The Japanese word translates literally to "explosion-affected people."

High alert - A state of readiness of nuclear forces sufficient to launch an immediate attack.

Ho Chi Minh Trail - A network of dirt roads and trails that carried supplies from North Vietnam through Laos, Cambodia and South Vietnam to Viet Cong and North Vietnamese forces fighting to topple the Saigon government.

Hollywood Ten - Members of the Screen Actors Guild who refused to answer questions before the House Un-American Activities Committee in 1947, during the height of U.S. anti-communist

hysteria. The 10 were Alvah Bessie, Herbert Biberman, Lester Cole, Edward Dmytryk, Ring Lardner, Jr., John Howard Lawson, Albert Maltz, Samuel Ornitz, Adrian Scott, and Dalton Trumbo. They all served six months imprisonment for contempt.

Hot line - A communications system that directly links two distant points. The best known Cold War hotline was installed between the White House (Washington) and the Kremlin (Moscow) in 1963. This hotline was designed to facilitate direct communications in the event of a confrontation or crisis. Despite news stories the hotline was not a telephone line, but a teleprinter link.

HUAC (House Un-American Activities Committee) - A committee of the US Congress. HUAC investigated and questioned suspected communists and communist sympathisers during the late 1940s and 1950s.

Hungarian Revolution - Mass uprising that began with reformist efforts by Hungarian Communist Party leader Imre Nagy; crushed by Soviet troops and tanks November 3-4, 1956.

Hydrogen bomb - First tested in 1952 by the United States and in 1953 by the Soviets; a nuclear weapon hundreds to thousands of times more powerful than the atomic bombs dropped on Hiroshima and Nagasaki. aka Thermonuclear weapon. The explosion results from the fusion of light atoms to form heavier ones.

Ii

Imperialism - A system where a powerful nation (dubbed the 'mother country') rules or dominates smaller, weaker nations (colonies). In most cases, the colony is exploited economically for its land, labour or resources.

Improvised nuclear device (IND) - A device that uses a simple, untested design to attempt to create a nuclear explosion.

Incapacitating agent - A chemical agent that causes psychological or mental effects in victims that prevent them from performing assigned missions, duties, or tasks.

India-Pakistan Agreement on Chemical Weapons - The 1992 India-Pakistan Agreement on Chemical Weapons provides for "*the complete prohibition of chemical weapons"* in India and Pakistan.

India-Pakistan Non-Attack Agreement - a unique bilateral agreement that obligates India and Pakistan to refrain from undertaking, encouraging, or participating in actions aimed at causing destruction or damage to nuclear installations or facilities in each country.

Intercontinental ballistic missile (or ICBM) - A guided missile, capable of long ranges (over 5,000 kilometres or 3,500 miles) and sub-orbital flight. Primarily designed for nuclear weapons delivery, these missiles could be fired from the United States to hit targets in Europe and Soviet Russia, and vice versa.

Intermediate-range ballistic missile (IRBM) - A guided missile, capable of medium ranges (between 600 and 3,500 miles).

International Atomic Energy Agency (IAEA) - Founded in 1957 and based in Vienna, Austria, the IAEA is an autonomous international organization in the United Nations system. The Agency's mandate is the promotion of peaceful uses of nuclear energy, technical assistance in this area, and verification that nuclear materials and technology stay in peaceful use.

International Code of Conduct Against Ballistic Missiles (ICOC) - A legally non-binding arrangement that was launched with the objective of preventing and curbing the proliferation of ballistic missile systems capable of delivering weapons of mass destruction.

International Convention on the Suppression of Acts of Nuclear Terrorism (NTC) - The General Assembly adopted the Nuclear Terrorism Convention in April 2005. It opened for signature

on 14 September 2005. The Convention addresses the unlawful possession or use of nuclear devices or materials by non-state actors.

International Nuclear Fuel Cycle Evaluation (INFCE) - This study, conducted between 1977 and 1980, discussed multilateral approaches to the nuclear fuel cycle, the development of regional fuel-cycle facilities, and cooperation on the storage of plutonium.

INF Treaty - Signed by Reagan and Gorbachev in 1987, the Intermediate-range Nuclear Forces treaty eliminated an entire class of missiles deployed in Europe: the U.S. cruise and Pershing II missiles and Soviet SS-20s.

Ionisation - The process by which a neutral atom or molecule acquires or loses an electric charge; the production of ions.

Ionising radiation - Radiation that produces ionisation in matter; examples include alpha particles, gamma rays, X-rays and neutrons. When these radiations pass through the tissues of the body, they have sufficient energy to damage the DNA.

Iran hostage crisis - In January 1979, an Islamic revolution led by the Ayatollah Ruhollah Khomeini forced the U.S.-backed leader, Shah Mohammed Reza Pahlavi, to flee. Students seized the U.S. Embassy on November 4, 1979, and held 52 Americans hostage for 444 days before releasing them unharmed.

Iron Curtain - The political and physical barriers between the Soviet bloc and the 'free' countries of Europe. The term was first used by Winston Churchill in a 1946 speech.

Irradiate - To expose to some form of radiation.

Isolationism - A foreign policy where a nation refuses to commit to alliances or 'take sides' in international disputes.

Isotope - One of two or more species of atoms of a chemical element with the same atomic number and position in the periodic table and nearly identical chemical behaviour but with different atomic masses and physical properties. Every chemical element has one or more isotopes.

Jj

Joint Convention on the Safety of Spent Fuel Management - Opened for signature in 1997 and entered into force in 2001, the Convention aims to achieve and maintain a high level of safety in spent fuel and radioactive waste management; ensure that there are effective defences against potential hazards during all stages of management of such materials; and prevent accidents with radiological consequences.

Joint Declaration on the Denuclearization of the Korean Peninsula - On 20 January 1992, both North and South Korea signed the Declaration, whereby both states agreed not to *"test, produce, receive, possess, store, deploy or use nuclear weapons; to use nuclear energy only for peaceful purposes; and not to possess facilities for nuclear reprocessing or uranium enrichment."*

Jupiter - An intermediate-range ballistic missile ballistic missile, developed and produced by the US Army during the 1950s and early 1960s. Nuclear-tipped Jupiter missiles capable of reaching the Soviet Union at short notice were deployed in Italy and Turkey in 1961. These missiles were removed in exchange for the withdrawal of Soviet missiles from Cuba in 1962.

Kk

Kiloton energy - Defined strictly as 10^{12} calories (or 4.2 X 10^{19} ergs). This is approximately the amount of energy that would be released by the explosion of 1000 tons of TNT. The kiloton is abbreviated as kT.

KGB - Russian acronym for the *Komitet Gosudarstvennoy Bezopasnosti*, or 'Committee for State Security', a secret police agency formed 1954. The Soviet Union intelligence- gathering and espionage agency and secret police; the broad equivalent of the CIA.

Kitchen Debate - A spontaneous and informal but politically charged discussion between US vice president Richard Nixon and Soviet leader Nikita Khrushchev in 1959. It took place among displays of a model American home, hence the name.

Korean War - A conflict (1950-53) between Soviet and Chinese backed North Korea and US and UN backed South Korea, for control of the Korean peninsula. It ended in stalemate with little change in territory.

Kremlin - A fortified citadel in central Moscow, housing numerous palaces, cathedrals and other historical buildings. During the Cold War, some Soviet leaders kept apartments there. The term "Kremlin" refers to Soviet executive government, in a similar fashion to the White House (US) or Westminster (UK).

Kent State - On May 4, 1970, at Kent State University in Ohio, four students protesting the Vietnam War were shot to death by Ohio National Guard troops; the incident galvanized popular support for the U.S. anti-war movement.

KOMSOMOL - Communist organization for Soviet youths aged 14 to 28; patterned after the Communist Party, its goals were to indoctrinate and train future members.

LI

La Coubre - Freighter carrying arms and munitions that exploded in Cuba's Havana harbour in 1959, killing more than 100 people; CIA sabotage was suspected but never proved.

Lachrymator - A chemical agent that causes victims to produce tears from the eyes. Also known as "tear gas," although many are not gaseous.

Lahore Declaration - An agreement in which India and Pakistan pledged to "*take immediate steps for reducing the risk of accidental or unauthorized use of nuclear weapons and discuss concepts and doctrines with a view to elaborating measures for confidence building in the nuclear and conventional fields, aimed at prevention of conflict."*

Launch Registration Convention – The convention obliges parties to register all objects launched into earth's orbit or outer-space with an appropriate national space agency, and entered into force in 1976. Under this Convention, information on the object launched into space, including the date and location of the launch and the function of the object in space is to be communicated to the UN Secretary General as soon as practicable.

Lavender Scare - A campaign to investigate and purge suspected homosexuals from the US government during the 1950s. It was based on the assumption that homosexuals could be blackmailed, coerced or seduced into assisting Soviet agents. Similar concerns were expressed in the UK into the mid 1970s.

Layered BMD system - An approach to ballistic missile defence that consists of several "layers" of weapons intended to intercept an incoming ballistic missile at different phases of its flight. A layered approach includes a first layer (e.g., boost phase) of defense, with remaining targets passed on to succeeding layers (e.g., midcourse and terminal).

Lethal dose (radiation) - The dose of radiation expected to cause death to an exposed population within 30 days to 50 percent of those exposed.

Limited Test Ban Treaty - 1963 agreement signed by the United States, Great Britain and the Soviet Union that prohibited the testing of nuclear weapons in the atmosphere, space and underwater.

Linkage - A U.S. negotiating policy developed by Henry Kissinger to offer concessions on technology and trade in exchange for a more responsible Soviet foreign policy.

Lisbon Protocol - The protocol of the 1991 START I Treaty, which entered in force in December 1994 as the result of negotiations between the United States and the Soviet Union/Russian Federation, held between 1982 and 1993 to limit and reduce the numbers of strategic offensive nuclear weapons in each country's nuclear arsenal.

Long Telegram - A lengthy 5,300-word diplomatic cable (sometimes wrongly cited as being more than 8,000 words), sent by George Kennan to the US State Department on February22, 1946. In this document Kennan offered advice on the Soviet Union and possible foreign policy approaches. This advice helped shape the Truman Doctrine, and other aspects of US policy throughout the Cold War.

Los Alamos - U.S. nuclear research and testing facility in the New Mexico desert where the world's first atomic bomb was developed during World War II.

Low enriched uranium (LEU) - uranium with a concentration of the isotope U-235 that is higher than that found in natural uranium but lower than 20% LEU (usually 3 to 5%). LEU is used as fuel for many nuclear reactor designs.

Mm

MAD (see mutually-assured destruction)

Madman theory - A strategy or ploy used by United States president Richard Nixon during the Cold War. It involved using deliberate signals and sending false information to communist countries, to create the impression that the President was unstable and might use nuclear weapons against them.

Malta Summit - A meeting between Bush and Gorbachev on warships near the Mediterranean island of Malta in December 1989, weeks after the fall of the Berlin Wall; both leaders agreed to pursue further conventional and nuclear weapons cuts.

Manhattan Project - Code name for U.S. and British development of the first atomic bomb; it began in 1944 at Los Alamos, New Mexico.

Marshall Plan - Postwar European recovery plan organized by U.S. Secretary of State George Marshall that was also intended to bolster Western democracy; nearly $13 billion was spent from 1948-1952. It provided funds to European nations to assist their reconstruction after World War II.

Marxism - A political philosophy and theory of history, developed in the 1800s by Karl Marx. It was the ideology that underpinned socialism in the Soviet Union and other Soviet bloc nations.

Massive retaliation - Eisenhower administration policy that pledged U.S. attacks in response to Soviet expansion; relied heavily on nuclear, rather than conventional, military forces.

Material protection, control, and accountability (MPC&A) - An integrated system of physical protection, material accounting, and material control measures designed to deter, prevent, detect, and respond to unauthorized possession, use, or sabotage of nuclear materials.

McCarran Act - Name given to the Internal Security Act, passed by the United States Congress in 1950. This act required communist organisations to register with the government, while government agencies were given power to investigate "subversive activities".

McCarthyism - Describes a period of intense anti-communism in the United States during the early 1950s. It was named for Senator Joe McCarthy, its chief instigator. McCarthyism saw hundreds of individuals interrogated and/or punished for their alleged communist sympathies.

McMahon Act - Name given to the (Atomic Energy Act of 1946) which determined how the United States would control and manage the nuclear technology it had jointly developed with its

World War II allies, the United Kingdom and Canada. Importantly it forbad the sharing of nuclear weapons technology and information with its allies, meaning that Britain developed its own nuclear weapons programme. Also the Act ruled that nuclear weapon development and nuclear power management would be under civilian, rather than military control, and established the United States Atomic Energy Commission for this purpose.

Medium-enriched uranium (MEU) fuel - Uranium fuel with a concentration of the isotope U-235 between 20 and 35%. MEU is sometimes used to fuel research reactors.

Megaton energy - Defined strictly as 10^{15} calories (or 4.2 X 10^{22} ergs). This is approximately the amount of energy that would be released by the explosion of 1000 kt (1 million tons) of TNT. The megaton is abbreviated as MT.

MI5 (Military Intelligence Section 5) - British intelligence and counter-espionage agency during the Cold War.

Mid phase (or midcourse phase) - The second phase in the flight path of a ballistic missile, following the boost and preceding the terminal phase. The midcourse phase is the longest phase in the flight path of a ballistic missile. For an ICBM, it lasts about 20 minutes. Its relatively long duration has rendered the midcourse phase the preferred point for interception by ballistic missile defense systems.

Military-industrial complex - An alleged confederacy between politicians, military commanders and industrial capitalists who manufacture weapons. It suggests that governments initiate wars to allow capitalists to produce more weapons, thus generating greater profits. The concept of a military-industrial complex was mentioned by US president Dwight Eisenhower in his farewell speech in 1961.

Minuteman - An American land-based intercontinental ballistic missile (ICBM), developed in the early 1960s to carry nuclear payloads. It was a significant element of the US nuclear arsenal during the Cold War. Deployed in silos, they replaced dependency on bombers.

MIRV (Multiple independently targeted re-entry vehicle) - MIRVs were first deployed in the 1960s, MIRV technology enabled missiles to carry a number of warheads aimed at separate targets.

Missile gap - An American perception, common in the 1950s, that the Soviet Union possessed a larger stockpile of ballistic missiles, especially intercontinental ballistic missiles (ICBMs). This was later proved to be incorrect.

Missile Technology Control Regime (MTCR) - An informal arrangement established in April 1987 by an association of supplier states concerned about the proliferation of missile equipment and technology relevant to missiles that are capable of carrying a payload over 500 kilograms over a 300-kilometer range. Though originally intended to restrict the proliferation of nuclear-capable missiles, the regime has been expanded to restrict the spread of unmanned aerial vehicles.

Molecule - The smallest portion of a substance that can exist by itself and retain the properties of the substance.

Monitoring - (In terms of radiation) The process of searching for the presence of radiation and then measuring, reporting and recording radiation dose rates found within a given area or on a person.

Morgenthau Plan - An American plan for managing post-war Germany, devised in 1944. It included the segmentation of greater Germany and the stripping away of its industries, leaving a primarily agricultural economy.

MPLA (Popular Movement for the Liberation of Angola) - One of three groups that vied for power after Portugal withdrew in 1975; members of the leftist group received military training in Cuba and arms from Moscow.

Mujahideen - U.S.-supported Islamic resistance fighters who fought against the Soviet occupation

in Afghanistan, with American funding and support. Some members of the mujahideen were later associated with the Taliban and Osama bin Laden's al-Qaeda. Term means "soldier of god."

Multilateral - Negotiations, agreements or treaties that are concluded among three or more parties, countries, etc.

Multiple Independently-targetable Reentry Vehicle (MIRV) - An offensive ballistic missile system with multiple warheads, each of which can strike a separate target and can be launched by a single booster rocket.

Mutation - A chemical change in the DNA in the nucleus of a cell. Mutations in sperm or egg cells or their precursors may lead to inherited effects in children. Mutations in body cells may lead to effects in the individual.

Mutual Defence Assistance Act - An act of the US Congress, passed in October 1949. It authorised the US government to supply military aid, equipment and support to nations at risk from communism. It was dubbed the 'Military Marshall Plan'.

Mutual deterrence - A condition of deterrence which exists between two adversaries.

Mutually assured destruction (or MAD) - A Cold War principle which suggested that a premeditated nuclear attack was unlikely, since both sides knew that the other would retaliate.

MX - U.S. intercontinental ballistic missiles (ICBMs) with a range of 5,000 miles and 10 warheads, each with an explosive yield of 500 kilotons.

Nn

Nagasaki - The second city in Japan on which an atomic bomb, "Fat Man," was dropped on 9 August 1945 during WWII. More than 74,000 people were killed.

Nationalisation - Process of transferring privately owned assets, such as companies or infrastructure, to government or public ownership. This may be done against the will of private owners, with or without compensation. Nationalisation usually occurs when a socialist government takes power in a capitalist nation.

National Defense Education Act - After the Soviet Union launched Sputnik, the United States began spending $2 billion a year on higher education in an effort to win the "brain race" with the Soviets.

National Liberation Front - (see Viet Cong)

National Security Agency (NSA) - An American government agency, formed in 1952. Its role was to gather information and intelligence by monitoring, intercepting and deciphering radio and signals traffic.

NATO - (see North Atlantic Treaty Organisation)

Negative security assurances - A pledge by a nuclear weapon state that it will not use nuclear weapons against a non-nuclear weapon state.

Nerve agent - A chemical weapon that attacks the human nervous system, leading to uncontrolled nerve cell excitation and muscle contraction. Specifically, nerve agents block the enzyme cholinesterease, so acetylcholine builds up in the nerve junction and the neuron cannot return to the rest state.

Neutron - An atomic particle (similar to a proton but without electrical change), of approximately unit mass (1-amu), present in all atomic nuclei, except those of ordinary (light) hydrogen. Neutrons are required to initiate the fission process, and large numbers of neutrons are produced by both fission and fusion reactions in nuclear (or atomic) explosions. Neutrons are emitted during fission and fusion by only a few radionuclides; long range (kilometres) in air and highly penetrating; an

external hazard only at detonation; densely ionising.

Neutron bomb - A thermonuclear weapon that delivers high amounts of radiation but with low explosive yield. These weapons still cause considerable death and injury to persons, but with much less damage to buildings and infrastructure.

New START - A treaty between the United States and Russia on further limitations and reductions of strategic offensive weapons, signed on 8 April 2010, which entered into force on 5 February 2011.

No Cities/Counterforce - Short-lived proposal developed by Kennedy's defense secretary, Robert McNamara, under which U.S. nuclear missiles would only target Soviet military forces and not cities.

No-First-Use - A pledge on the part of a nuclear weapon state not to be the first party to use nuclear weapons in a conflict or crisis.

Non-Aligned Movement - An organisation of governments not allied with either the Soviet or Western blocs. The NAM aimed to chart a middle course and foster development in Second and Third World nations. It was founded in 1961 by Indian prime minister Jawaharlal Nehru, Yugoslavian president Josip Tito, Egyptian president Gamal Nasser and other leaders.

Non-ionising radiation - Radiation that does not produce ionisation in matter; examples include ultraviolet radiation, light, infrared radiation and radio-frequency radiation. When these radiations pass through the tissues of the body they do not have sufficient energy to damage the DNA directly.

Non-nuclear weapon state (NNWS) - NNWS are states that had not detonated a nuclear device prior to 1 January 1967, and who agree in joining the NPT to refrain from pursuing nuclear weapons.

Non-proliferation - Measures to prevent the spread of biological, chemical, and/or nuclear weapons and their delivery systems.

Nonproliferation and Disarmament Initiative (NPDI) - Founded by Australia, Canada, Chile, Germany, Japan, Mexico, the Netherlands, Poland, Turkey, and the United Arab Emirates in September 2010, the Nonproliferation and Disarmament Initiative (NPDI) is a ministerial-level group of states within the framework of the Non-proliferation Treaty focused on practical steps that will forward the consensus outcomes of the 2010 NPT Review Conference.

Nonproliferation Treaty (NPT) - Signed in 1968, the (NPT) is the most widely adhered-to international security agreement. The “three pillars” of the NPT are nuclear disarmament, nonproliferation, and peaceful uses of nuclear energy. The NPT provides for conferences of member states to review treaty implementation at five-year intervals. Initially of a 25-year duration, the NPT was extended indefinitely in 1995.

NORAD - A joint US-Canadian military command centre, tasked with monitoring North American airspace for a possible attack. NORAD was commissioned in 1956 and began operations in 1958.

North Atlantic Treaty Organisation (or NATO) - Trans-Atlantic military alliance, formed in 1949. During the Cold War NATO served as an anti-Soviet bloc alliance. Currently there are thirty members.

NSC-68 (National Security Council Report 68) - Written in 1950 by the U.S. State Department's Paul Nitze, National Security Council Report 68 predicted the Soviets could launch a nuclear attack on the United States by 1954 and recommended an increase in U.S. spending for nuclear and conventional

Nuclear Forensics - The process of investigating the origin of nuclear material, for example in nuclear materials trafficking cases.

Nuclear Non-Proliferation Treaty (1972) - Gave the U.N. International Atomic Energy Agency

the added job of inspecting treaty states for evidence that nuclear materials designed for peaceful purposes were being diverted to military use.

Nuclear football - A briefcase carried by a military attache to the US president. It contains launch codes and other information needed if a nuclear strike or retaliation is needed. The nuclear football travels with the president wherever he goes.

Nuclear radiation - Particulate and electromagnetic radiation emitted from atomic nuclei in various nuclear processes. The important nuclear radiations, from the weapons standpoint, are alpha and beta particles, gamma rays, and neutrons. All nuclear radiations are ionising radiations, but the reverse is not true. X-rays, for example, are included among ionising radiations, but they are not nuclear radiations since they do not originate from atomic nuclei, likewise ultra-violet light is classed as non-ionising.

Nuclear sharing - The Cold War practice of sharing American nuclear weapons with its NATO partners.

Nuclear (use) doctrine - The fundamental principles by which a country's political or military leaders guide their decision-making regarding the conditions for the use of nuclear weapons.

Nuclear energy - The energy liberated by a nuclear reaction (fission or fusion), or by radioactive decay.

Nuclear Energy Agency - A specialized agency within the Organization for Economic Cooperation and Development (OECD) that was established in 1958. The NEA's objective is to assist member countries in maintaining and developing nuclear energy as a safe, environmentally acceptable, and economical energy source by serving as a forum where states can share information and experience and promote international cooperation.

Nuclear installation - Term used to denote a nuclear power reactor, a nuclear research reactor, a critical facility, a conversion plant, a fabrication plant, a reprocessing plant, an isotope separation plant, a separate storage installation, or any other facility at which fresh or irradiated nuclear material or significant quantities of radioactive materials are present.

Nuclear Posture Review - Under a mandate from the U.S. Congress, the Department of Defense regularly conducts a comprehensive Nuclear Posture Review to set forth the direction of U.S. nuclear weapons policies.

Nuclear Security Summits - A series of international summits that emerged out of U.S. President Barack Obama's call in April 2009 to "secure all vulnerable nuclear material around the world within four years." The summit process focuses on strengthening international cooperation to prevent nuclear terrorism, thwarting nuclear materials trafficking, and enhancing nuclear materials security.

Nuclear Suppliers Group (NSG) - Established in 1975, its members commit themselves to exporting sensitive nuclear technologies only to countries that adhere to strict non-proliferation standards.

Nuclear weapon (or bomb) - general name given to any weapon in which the explosion results from the energy released by reactions involving atomic nuclei, either fission or fusion, or both. Thus, the A (or atomic) bomb and H (or hydrogen) bomb are both nuclear weapons. It would be equally true to call them atomic weapons, since it is the energy of atomic nuclei that is involved in each case. However, it has become more or less customary, although it is not strictly accurate, to refer to weapons in which all the energy results from fission as A-bombs or atomic bombs.

Nuclear-weapon states (NWS) - As defined by Article IX, paragraph 3 of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the five states that detonated a nuclear device prior to 1 January 1967 (China, France, the Soviet Union, the United Kingdom, and the United States). Coincidentally, these five states are also permanent members of the UN Security Council. States

that acquired and/or tested nuclear weapons subsequently are not internationally recognized as nuclear-weapon states.

Nuclear winter - A theoretical period of several months following a major nuclear exchange. During this period nuclear fallout and other debris lingers in the atmosphere, blocking out sunlight. This lack of natural light causes a slowing in plant and animal growth, making farming difficult or impossible.

Nucleus - The core of an atom, occupying little of the volume, containing most of the mass, and bearing positive electric charge.

Nucleus of a cell - The kernel of the basic unit of tissue, controlling the activity of the cell. Contains DNA.

Nuclide - A species of atom characterised by the number of protons and neutrons and, in some cases, by the energy state of the nucleus.

Oo

Office of Public Health Preparedness and Response (OPHPR) - US federal agency that is focused on minimizing the threat to health from terrorist acts, accidents, and chemical, biological and radiological threats.

Oil Crisis of 1973 - Initiated in October 1973 when OPEC (see below) reduced production and banned the sale of oil to several nations, including the US, Canada and Britain. It was imposed as a protest against US military support for Israel. The oil embargo had a dire impact on the US economy. The embargo was lifted in March 1974.

Olympic boycott - An Olympic boycott involved one or more nations refused to send athletes to the Olympic Games, usually as a political protest. There were several Olympic boycotts during the Cold War. Communist China boycotted all Olympics between 1956 and 1980, as the IOC did not recognise its government. The US boycotted the 1980 Moscow Olympics as a protest against the Soviet invasion of Afghanistan. The Soviet Union retaliated by boycotting the 1984 Los Angeles Olympics.

OPANAL - The Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (OPANAL) is an intergovernmental agency created by the Treaty of Tlatelolco to ensure that the obligations of the Treaty are met. Since 1998, all 33 states in Latin America and the Caribbean have been Members of OPANAL.

OPEC (Organisation of Petroleum Exporting Countries) - A cartel founded in Baghdad in September 1960. It was founded to give Arab oil-producing nations greater leverage when dealing with US and Western oil companies. OPEC was responsible for the 1973 Oil Crisis (see above).

Open Skies - Proposal by Eisenhower to let the superpowers see each other's military blueprints and installations and place reconnaissance units in each other's territory. Khrushchev's rejection led to the U.S. deployment of the U-2 spy plane.

Operation Ivy - On November 1, 1952, the world entered the thermonuclear era with the U.S. detonation of the first hydrogen bomb; its force was equivalent to more than 10 million tons of TNT - 1,000 times the power of the Hiroshima bomb.

Order of magnitude - Quantity given to the nearest power of ten. Proton. An elementary particle with approximately unit atomic mass and with unit positive electric charge.

Organization for Security and Cooperation in Europe (OSCE) - Created in 1975 as the Conference on Security and Cooperation in Europe (CSCE) as part of the Helsinki negotiations between the United States and the Soviet Union. The OSCE is composed of most NATO and former Warsaw Pact nations, including the United States, Canada, and Russia. Its purpose is to guarantee

European security and human rights.

Organization for the Prohibition of Chemical Weapons (OPCW) - Based in The Hague, the Netherlands, the OPCW is responsible for implementing the Chemical Weapons Convention (CWC). All countries ratifying the CWC become state parties to the CWC, and make up the membership of the OPCW. The OPCW meets annually, and in special sessions when necessary.

Ostpolitik - A *Détente* era policy adopted by West Germany and its leader, Willy Brandt. Its aim was to improve communications and economic ties with East Germany. It led to treaties with Poland, the Soviet Union and East Germany and won Brandt the Nobel Peace Prize in 1971.

The Outer Space Treaty - *The Treaty on Principles Governing the Activities of States in the Exploration and use of Outer Space, Including the Moon and other Celestial Bodies* prohibits the placement of Weapons of Mass Destruction in orbit around the earth, on the moon or any other celestial body, or otherwise in outer space. The treaty also stipulates that the exploration and use of outer space be carried out for the benefit and in the interest of all countries, and that the moon and other celestial bodies are to be used exclusively for peaceful purposes. It was opened for signature on 27 January 1967, and entered into force on 10 October 1967.

Pp

P-5 - The five permanent members of the United Nations Security Council: China, France, the Russian Federation, the United Kingdom, and the United States.

Paris Peace Accords - Final treaty following the Paris Peace Talks from May 1968 to January 1973 that led to the U.S. pull-out from the war in Vietnam and, ultimately, victory by the North Vietnamese.

Partial Test Ban Treaty (PTBT) - Also known as the Limited Test Ban Treaty (LTBT), the Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space and Under Water prohibits nuclear weapons tests "or any other nuclear explosion" in the atmosphere, in outer space, and under water. While the treaty does not ban tests underground, it does prohibit nuclear explosions in this environment if they cause "radioactive debris to be present outside the territorial limits of the State under whose jurisdiction or control" the explosions were conducted. The treaty is of unlimited duration.

Passive defenses - Measures intended to reduce the consequences of a (WMD) attack (e.g., the use of shelters during a nuclear attack, the use of protective clothing to reduce the impact of a chemical weapons attack, or the use of inoculations to reduce the impact of a biological weapons attack).

Pathogen - A microorganism capable of causing disease.

Patriot - First deployed in 1984, is the U.S. Army's air and missile defense system. The Patriot Advanced Capability (PAC) is the anti-theater ballistic missile defence component of the Patriot system.

PB Success - Code name for a 1950s CIA operation that used disaffected exiles and peasants to overthrow the government of Guatemalan President Jacobo Arbenz after his land reform program threatened the holdings of the U.S.-based United Fruit Company.

Peaceful coexistence - Term used by Nikita Khrushchev in 1963 to describe a situation in which the United States and Soviet Union would continue to compete economically and politically without launching a thermonuclear war.

Peaceful Nuclear Explosion Treaty (PNET) - The Treaty between the United States and the USSR on Underground Nuclear Explosions for Peaceful Purposes was signed in May 1976. The agreement governs all nuclear explosions conducted outside of nuclear test sites specifically named in the Threshold Test Ban Treaty. The PNET entered into force in December 1990. Many of its provisions were superseded by the Comprehensive Nuclear Test Ban Treaty, which bans all nuclear explosions.

People's Liberation Army - Welcomed in Beijing as heroes in 1949 after the revolution in China, the country's armed forces were reorganized in the 1960s, it led to the Cultural Revolution.

Perestroika - A Russian word meaning 'restructuring'. It was used to described reforms implemented by Mikhail Gorbachev in the Soviet Union in the mid 1980s. *Perestroika* involved some liberal reforms and a relaxation of centralised controls over the economy.

Pershing - Class of U.S. nuclear missiles deployed in West Germany in the 1970s and '80s; the Pershing 1A, with a limited range and huge explosive yield, was replaced with the Pershing II following public opposition to the 1A and Soviet deployment of the mobile SS- 20 missiles.

Persistent - In the context of chemical agents, the ability to remain in liquid form without evaporating for some length of time at normal temperatures and pressures.

Ping pong diplomacy - Events in the early 1970s, when an American table tennis undertook a tour of communist China. This tour helped ease US-Chinese tensions and paved the way for Richard Nixon's official visit to China in February 1972.

Point Alpha (Observation Post Alpha) - A US Army lookout in West Germany, close to the border with West Germany. It overlooked an area of flat land that was considered a likely invasion route for Warsaw Pact tanks.

Polaris - The first submarine-launched ballistic missiles (SLBMs), they were developed by the USA but soon replaced by the more advanced Poseidon missiles. Britain, though, chose to rely on upgraded Polaris missiles.

Politburo - Executive council or cabinet of ministers in the Soviet Union and other socialist nations.

Post-colonialism - Period following colonial rule and the effects on societies ruled by colonial powers. During the 20th century, Western imperial powers like Britain, Portugal and France withdrew from colonies in Africa, Asia and elsewhere. These colonies became self-governing and many were subjected to Cold War pressures and influences.

Positive security assurances - A guarantee given by a nuclear weapon state to a non-nuclear weapon state for assistance if the latter is targeted or threatened with nuclear weapons.

Prague Spring - A brief period of liberal reform and freedom in socialist Czechoslovakia in 1968 under the leadership of Alexander Dubcek. The Prague Spring reforms were ultimately suppressed by Moscow. It ended in August 1968 with Dubcek's arrest and the massing of 650,000 Soviet-backed troops in the country.

Pre-emptive military action - An attack launched to preempt expected aggression by an enemy. In the context of WMD issues, this would involve striking WMD arsenals or facilities to eliminate them before broader hostilities ensue.

Project A119 - An American project, devised in 1958 to secure advantage in the Space Race. The objective of Project A119 was to detonate a large nuclear weapon on the Moon that would be visible to the naked eye. The project was abandoned in 1959.

Proliferation (of weapons of mass destruction) - The spread of biological, chemical, and/or nuclear weapons, and their delivery systems. Horizontal proliferation refers to the spread of WMD to states that have not previously possessed them. Vertical proliferation refers to an increase in the quantity or capabilities of existing WMD arsenals within a state.

Proxy war - A conflict where larger nations support and supply smaller nations involved in a war or civil war, without becoming directly involved.

Qq

Rr

Radiation (Ionizing) - Radiation that has sufficient energy to remove electrons from substances that it passes through, forming ions. May include alpha particles, beta particles, gamma rays, x-rays, neutrons, high-speed electrons, high-speed protons, and other particles capable of producing ions.

Radioactive - Possessing radioactivity.

Radioactivity - The property of radionuclides of spontaneously emitting ionising radiation. By extension, materials containing radionuclides.

Radiation shielding - Any material that absorbs radiation, which may be used to protect personnel or materials from the effects of ionizing radiation.

Radiation source - Usually a sealed source of radiation used in teletherapy and industrial radiography, as a power source for batteries, or in various types of industrial gauges. Machines, such as accelerators, radioisotope generators, and natural radionuclides may be considered sources. Some sources are also used for research and experimentation.

Radiation syndrome (also called radiation sickness) - The complex of symptoms resulting from excessive exposure of the human body to acute ionizing radiation. The earliest symptoms may include nausea, fatigue, vomiting, and diarrhea, which may be followed by loss of hair, hemorrhage, inflammation of the mouth and throat, and a general loss of energy. In severe cases, where the radiation has been approximately 1,000 rad (acute dose) or more, death may occur within two to four weeks. Those who survive six weeks after the receipt of a single large dose of radiation to the whole body may generally be expected to recover. Over the long-term, there are also stochastic health effects from radiation exposure, meaning an increased probability of cancers and other negative effects on a person's health.

Radiation weighting factor (RWF) - A factor intended to take account of the relative biological effectiveness of different types of radiation according to both their energies and how densely ionising they are.

Radioactive decay - The spontaneous emission of energy and/or particles from the nucleus of a radioactive atom. This is most often in the form of either alpha or beta particles, gamma radiation, or spontaneous fission where the nucleus undergoes fission without the bombardment of a particle or photon. Each radioactive isotope has an associated half-life, and the amount of radioactive material decreases over time as the material decays.

Radioactive waste - Materials which are radioactive and for which there is no further use.

Radio Free Europe/Radio Liberty - Radio station launched by the United States in the early 1950s in an effort to reach the people of Eastern Europe and the Soviet Union, the service moved its headquarters from Munich to Prague in 1995 and now transmits 700 hours of programming weekly in 23 languages.

Radiological dispersion device (RDD) - Any device, other than a nuclear explosive device, designed to spread radioactive material.

Radiological protection - The science and practice of limiting the harm to humans from radiation.

Radiological terrorism - Terrorist acts intended to release harmful radiation, through sabotage of a nuclear facility or the detonation of a radiological dispersal device (RDD).

Radionuclide - An unstable nuclide (atomic nucleus) that emits ionising radiation.

Rapprochement - A French term describing a reconciliation or re-establishment of good relations between parties that were previously hostile. In the context of the Cold War, rapprochement usually

refers to the improvement in relations during Détente (early 1970s) and the Gorbachev era (late 1980s).

Ratification - The implementation of the formal process established by a country to legally bind its government to a treaty, such as approval by a parliament. Following ratification, a country submits the requisite legal instrument to the treaty's depository governments Procedures to ratify a treaty follow its signature.

RB-47 - U.S. Warplane shot down in 1960 after it allegedly entered Soviet airspace. A year later, after Kennedy's election, Khrushchev released the plane's pilots.

Re-activation - The reversal of measures to deactivate or de-alert missiles, or the return of former military facilities or equipment to military use.

Reagan Doctrine - Foreign policy implemented by US president Ronald Reagan, which aimed to "rollback" communism. The granting of support and aid to "freedom fighters" (anti-communist groups and movements) was at the core of the Reagan Doctrine.

Red Army - Armed forces of the Soviet Union, formed after the Bolshevik revolution from the rebel Red Guards and the ruins of the Imperial Army.

Red Guards - Organized student battalions in China during the Cultural Revolution that met en masse with Mao Tse-tung and were encouraged to carry his "little red book" and rebel against "capitalist roadsters." In pre-Soviet Russia, it was also the name of the Bolshevik army.

Red Scares - Two periods of anti-communist hysteria in the United States. The first Red Scare followed the Russian Revolution (1918-19), the second emerged in the post-war and McCarthyist eras (from the late 1940s to the early 1950s).

Redstone - Surface-to-surface ballistic missile developed by Wernher Von Braun's team and tested successfully in August 1953; with a range of 500 miles, it was used to lift the first U.S. astronaut into space.

Re-entry phase - The portion of the trajectory of a ballistic missile or space vehicle when the vehicle re-enters the earth's atmosphere.

Re-entry Vehicle (RV) - A nuclear warhead on a ballistic missile specially designed to re-enter the earth's atmosphere in the terminal portion of the missile's trajectory.

Refuseniks - An unofficial term for Soviet Jews and others who were denied exit visas and were persecuted for trying to leave the U.S.S.R. Others included Volga Germans attempting to leave for Germany, Armenians wanting to join their diaspora, and Greeks forcibly removed by Stalin from Crimea and other southern lands to Siberia. Members of persecuted religious groups, such as the Ukrainian Greek-Catholic Church, Baptists and other Protestant groups, Russian Mennonites, and Jehovah's Witnesses.

Republikflucht - German for 'flight from the Republic'. It refers to the waves of emigration from East Germany to West Germany, or other non-Soviet countries, between 1949 and 1961. The Republikflucht was ended by the closure of the East German border and the erection of the Berlin Wall.

Resilience - Refers to economic and psychological endurance and adaptation in the wake of an attack or a terrorist act.

Revisionist historians - argue that the United States and its expansionist foreign policy were chiefly responsible for the Cold War. Its policymakers wanted to contain Soviet communism to keep Europe and the world free for US companies and American trade.

Revolution - A period of rapid political, social and/or economic change in a particular nation or region. It often involves radical political ideas and some violence.

Reykjavik summit - Gorbachev and Reagan's Iceland meeting in October 1986; it was noted for the Soviet leader's two surprise proposals: cut strategic nuclear forces in half, and eliminate all nuclear weapons in 10 years. His plan, designed to stem the United States' "Star Wars" initiative, failed.

Rezidentura - A Russian word, describing a base of operations for spies in foreign countries.

Risk - The probability of injury, harm or damage.

Risk factor - In radiological terms is the probability of cancer and leukaemia or hereditary damage per unit dose equivalent. Usually refers to fatal malignant diseases and serious hereditary damage.

Rollback - A foreign policy objective of US president Ronald Reagan. Rollback aimed to reduce the size of the Soviet bloc, rather than to contain it.

Rolling Thunder - US bombing campaign against North Vietnam launched by Johnson in response to a Viet Cong attack on Pleiku air base that killed eight Americans and wounded hundreds more.

Russian revolution - The 1917 Bolshevik uprising against the czarist autocracy; it was an effort to turn a peasant society into a new kind of democratic, collectivized country.

Russification - any move to impose Russian language or culture onto non-Russian people or regions. There were several attempts to 'Russify' ethnic and national minorities in the Soviet Union during the Cold War.

Ss

Safeguards - A system of accounting, containment, surveillance, and inspections aimed at verifying that states are in compliance with their treaty obligations concerning the supply, manufacture, and use of civil nuclear materials.

SALT - (see Strategic Arms Limitation Talks)

Sanctions - Punitive measures, for example economic in nature, implemented in response to a state's violation of its international obligations.

Satellite nation - A satellite nation is nominally independent but relies on a larger nation for political direction and economic support.

Scud - Designation for a series of short-range ballistic missiles developed by the Soviet Union in the 1950s and transferred to many other countries.

SDI - (see Strategic Defence Initiative)

Sea-Launched Cruise Missile (SLCM) - Cruise missiles with conventional or nuclear payloads that are launched from submarines.

Seabed Treaty - The Treaty on the Prohibition of the Emplacement of Nuclear Weapons and other Weapons of Mass Destruction on the Seabed and the Ocean Floor and in the Subsoil Thereof prohibits the placement of nuclear weapons or any other weapons of mass destruction on the seabed, the ocean floor, and in the subsoil of the ocean floor beyond a signatory's 12-miles coastal zone.

Second Cold War - Term sometimes used to describe the post-Détente revival of tensions during the early 1980s.

Second Line of Defense (NNSA) - DOE NNSA program that works to prevent illicit trafficking in nuclear and radiological materials by securing international land borders, seaports and airports that may be used as smuggling routes for materials needed for a nuclear device or a radiological dispersal device.

Secret Speech - An address given to the Congress of Soviets by Russian leader Nikita Khrushchev

in February 1956. In this speech Khrushchev denounced the tyranny, brutality and “abuses of power” under his predecessor, Soviet dictator Joseph Stalin. The speech is commonly known as; "On the Personality Cult and its Consequences".

Secret police - A state-run police force that investigates, spies on, identifies and eliminates potential opponents. Examples of Cold War secret police agencies were the KGB (Soviet Union), the Stasi (East Germany) and the Securitate (Romania).

Securitate - The secret police force of socialist Romania for much of the Cold War.

Self-determination - A political principle which argues that populations should have the right to decide their own political system and government.

Sievert - The SI derived unit of radiation absorption. The sievert takes into account the relative biological effectiveness of ionising radiation, sine each form of radiation has a different effect on living tissues, Accordingly it is defined as a the amount of radiation that is equivalent in biological terms to one gray of gamma radiation. The Sievert is a very large unit, and so the millisievert (1/1000 sievert) is used. One millisievert corresponds to 10 ergs of gamma radiation transferred to one gram of living tissue. See effective dose equivalent. Symbol Sv.

Singing Revolution - Name given to the independence movement in the Baltic states (Estonia, Latvia and Lithuania) between 1987 and 1991. It takes its name from the sustained public singing in its early days.

Single Integrated Operational Plan (SIOP) - The nuclear war plan for an integrated response to a nuclear attack on the United States. With guidance from the President, the Secretary of Defense, and the Joint Chiefs of Staff, the Staff of the U.S. Strategic Command (STRATCOM) work out the details of the SIOP. STRATCOM designs and maintains the list of targets for nuclear attacks. The Pentagon formally changed the name of the SIOP in 2003, to OPLAN 8044 Revision (FY)

Sino-Soviet split - A breakdown in relations between China and the Soviet Union during the mid to late 1960s. It culminated in a brief border war in 1969.

Socialism - A political system which aims to transition from capitalism to communism. Socialist systems involve, among other things, government control of the economy and prohibitions of private ownership of capital.

Solidarnosc **(or Solidarity)** - A trade union formed by Polish shipworkers in September 1980. Under the leadership of Lech Walesa, its membership grew to more than 10 million members. Solidarity played a pivotal role in bringing about liberal reform and free elections in Poland in 1989.

South Asian Association for Regional Cooperation (SAARC) - An organization of South Asian states focusing on 11 different areas of cooperation. Regional meetings occur annually among heads of state, and biannually among foreign secretaries.

South-East Asia Treaty Organisation (or SEATO) - An alliance of eight Asia-Pacific countries, formed in 1955. Its main aim was to limit communism in the region.

Soviet bloc - Or Eastern bloc refers to communist nations in Europe during the Cold War.

Sovietisation - A term for the process by which communist governments were installed in eastern European nations after World War II (1945-50). This process was initiated during the Soviet military occupation and overseen by Soviet agents and loyalists. In most cases, local communist, socialist and left-wing groups were merged into larger parties. Pro- Moscow communists were installed as leaders of these combined parties. These communist parties then obtained control of the government in elections, some of which may have been rigged.

Space Race - Refers to American and Soviet competition in rocket technology and space exploration, from the 1950s to around 1975.

Special nuclear material - Defined in the U.S. Atomic Energy Act of 1954 as plutonium, uranium-233, or uranium enriched in the isotope uranium-235.

Speech of Hope - A public address, given by US Secretary of State James F. Byrnes in Stuttgart, Germany in September 1946. Byrnes assured listeners that the US would protect German sovereignty and, in time, support a return to German self government.

Sphere of influence - A region or group of nations controlled or influenced by another powerful nation.

Sputnik (Russian for 'traveller') - The name of the first two man-made satellites to orbit Earth. They were launched by the Soviet Union in 1957. The launch of Sputnik I triggered American fears that the US had fallen behind the Soviet Union in space technology.

SSBN (Ship, Submersible, Ballistic, Nuclear) - A hull classification for a submarine capable of launching a ballistic missile. The "N", or nuclear, refers to the ship's propulsion system. SSBN's are generally reserved for strategic vessels, as most submarine launched ballistic missiles carry nuclear payloads. A non-strategic vessel carries the designation SSN, or attack submarine.

SSGN (Ship, Submersible, Guided, Nuclear) - A hull classification for a submarine that carries guided cruise missiles. The "N", or nuclear, refers to the ship's propulsion system. Also known as attack submarines, SSGNs serve a conventional military support role and are often used for special forces transportation.

Stalinist - An individual or group who is loyal to Soviet dictator Joseph Stalin, or who attempts to replicate aspects of Stalin's leadership, such as strict authoritarianism or a cult of personality. Cold War leaders who utilised Stalinist methods included Kim Il-sung (North Korea), Nicolae Ceausescu (Romania) and Enver Hoxha (Albania).

Stasi - An abbreviation for the Ministry of State Security, a secret police agency in socialist East Germany. The Stasi was responsible for security and intelligence-gathering. It was one of the Cold War's most repressive and brutal security forces.

StB - An abbreviation for Statni Bezpecnost, a plain-clothed secret police agency in communist Czechoslovakia.

Star Wars program - (see Strategic Defence Initiative)

States of concern - The term used to denote states perceived as hostile to the United States and its allies and which are developing or possess WMD. The term "states of concern" has replaced the term "rogue" states due to its political sensitivity. The latter term was originally used during the Clinton Administration. Though the U.S. Department of State has discouraged use of the term "rogue states," it is still used by some U.S. officials, especially in reference to North Korea, Syria, and Iran.

START (or Strategic Arms Reduction Treaty) - The first Strategic Arms Reduction Treaty (START I) was signed by Mikhail Gorbachev and George Bush in Moscow in July 1991. Amongst its terms was a limitation on the number of nuclear warheads and intercontinental ballistic missiles (ICBMs). START has since been renewed three times.

Strategic Air Command (SAC) - A branch of the US Air Force during the Cold War. It was in charge of America's airborne assets, including strategic bombers, intercontinental ballistic missiles (ICBMs) and reconnaissance aircraft. SAC also monitored warning systems that watched for incoming attacks.

Strategic Arms Limitation Talks (or SALT I and SALT II) - Two US-Soviet arms reduction summits, held in 1972 and 1979.

Strategic Defence Initiative (or SDI, 'Star Wars' program) - A missile defence program, initiated by the Reagan administration in 1983. Features of SDI included early warning systems, missile

interception systems and research into the use of armed satellites.

Strategic nuclear weapon - A larger yield device, intended for launching against cities, ports, military bases or other large targets of significance.

Strategic Offensive Reductions Treaty (SORT) - Vladimir Putin and George W. Bush signed the Strategic Offensive Reductions Treaty, also called the Treaty of Moscow on 24 May 2002. The treaty stated that both the United States and Russia would reduce the numbers of their deployed nuclear warheads to between 1700 and 2200 within the next ten years. It established a Bilateral Implementation Commission, scheduled to meet at least twice a year, to establish procedures to verify and assist reductions. The treaty was rendered obsolete by the signing of the New START treaty in 2010.

Sub-critical mass - A mass of fissionable material that is smaller than that required for a self-sustaining chain reaction.

Submarine-launched ballistic missile (SLBM) - A ballistic missile that is carried on and launched from a submarine.

Superpower - A nation that dominates its region, due to its size and political, military and economic strength. The United States and the Soviet Union were both superpowers during the Cold War.

Tt

Tactical nuclear weapon - A smaller yield device, intended for use on the battlefield or against smaller targets.

Team B - An investigative committee established by US president Gerald Ford in 1976. It was tasked with analysing the Soviet military threat to the US. Stacked with hardliners and anti-communists, Team B's report greatly exaggerated Soviet weapons stockpiles and falsely claimed that Moscow was willing to initiate war with the US. These findings, though later discredited, contributed to the US arms buildup under Ronald Reagan.

Terminal-phase - The third and final phase of the flight path of a ballistic missile. Refers to the trajectory of the warhead, now decoupled from the missile, as it re-enters the earth's atmosphere and proceeds to its target.

Tet Offensive - A major campaign, in January and February 1968, during the lunar new year Tet, North Vietnamese and Viet Cong forces launched a series of attacks in South Vietnam; seen by many as the turning point in the Vietnam War. While the communists were defeated, the Tet Offensive showed that American victory in Vietnam was some years away.

Theatre ballistic missile - Short- or medium-range ballistic missiles with a range between 300km and 3,500 km.

Thermonuclear weapon - A device that uses both fusion and fission, thus delivering a greater explosive yield. Thermonuclear weapons were first tested by the US (1952) and the Soviet Union (1954). They are colloquially known as 'hydrogen bombs' or 'H-bombs'.

Threshold Test Ban Treaty (TTBT) - Officially called the "Treaty on the Limitation of Underground Nuclear Weapon Tests," this treaty between the United States and the Soviet Union prohibited underground nuclear weapon tests having a yield exceeding 150 kilotons. The treaty was signed on 3 July 1974, and entered into force on 11 December 1990.

Tiananmen Square - Ais a large public square in Beijing. It was the location where Mao Zedong proclaimed a communist victory in October 1949, and a pro-democratic student demonstration crushed by the government in June 1989.

Titan - U.S. intercontinental ballistic missiles (ICBMs) that entered service in 1963 and were

dismantled in 1987 under the SALT I treaty. Titan II missiles had a 7,500-mile range and carried nine-megaton warheads.

Tonkin Gulf - North Vietnamese patrol boats allegedly fired on the USS Mattox in the Gulf of Tonkin on August 2, 1968. Five days later, Congress approved the Gulf of Tonkin Resolution giving Johnson authority to send troops to Vietnam

Toxin - A poison formed as a specific secretion product in the metabolism of a vegetable or animal organism, as distinguished from inorganic poisons. Such poisons can also be manufactured by synthetic processes.

Trapos - Transport police in East Berlin who helped seal the border with West Berlin in August 1961.

Treaty of Brussels - A 1948 agreement between five European states: Britain, France, Belgium, the Netherlands and Luxembourg. The Brussels treaty was a forerunner to the NATO agreement.

Triage - A process for sorting injured or ill people into prioritized groups based on their need for and/or likely benefit from immediate medical treatment.

Trident - Submarine-launched ballistic missiles armed with multiple warheads; Trident II missiles had a range of more than 4,000 miles and carried 10 to 15 warheads each.

Truman Doctrine - United States' foreign policy with regard to communism. It was developed and articulated by US president Harry Truman in 1947. Truman pledged to provide U.S. military and economic aid to any nation threatened by communism.

Tsar Bomba - A thermonuclear weapon constructed by the Soviet Union. At 50 megatons it was the largest nuclear weapon ever constructed and tested. It was detonated in remote northern Russia in 1961.

TU-95 - Soviet jet bomber capable of delivering a nuclear device to the United States; 10 of the bombers were displayed for the West at the 1955 Moscow Air Show.

Uu

U-2 - an American spy plane used widely during the Cold War. It was able to fly at high altitude, avoiding enemy radar detection and surface-to-air missile systems. U-2s were used chiefly to collect surveillance photographs. The capture of an American U-2 by the Soviets in 1960 caused an international incident.

Unauthorized launch - The launch of a (nuclear) missile without the authorization of the leadership legally endowed with such decision-making power. The term generally refers to an accidental or unintended launch that occurs because of faulty intelligence, systematic or mechanical failures, or the mistaken actions of military personnel.

United Nations (UN) - A multilateral body, formed in 1945. The UN has many roles, including investigating international problems and forming resolutions to avoid conflict. Its effectiveness was neutralised by US and Soviet hegemony during the Cold War.

UNITA - One of three groups vying for power in Angola in the 1970s, the U.S.-backed National Union for the Total Independence of Angola was established in southern Angola under the leadership of Jonas Savimbi.

USSR (in Russian, CCCP) - The Union of Soviet Socialist Republics, usually abbreviated to the Soviet Union, was one of the main protagonists of the Cold War. The USSR contained 15 different socialist republics, though in most respects they were governed centrally by Moscow.

Vv

Velvet Revolution - A popular movement in Czechoslovakia in late 1989 led by playwright Vaclev Havel, that culminated in the fall of communism in that country in November 1989.

Viet Cong - A Western term for the National Liberation Front, or NLF, a group of communist guerrillas who operated in South Vietnamese and between 1959 and 1975. The Viet Cong fought against American forces during the Vietnam War (1965-75).

Viet Minh - A Vietnamese nationalist-communist group, led by Ho Chi Minh. It defeated French colonial forces in the Second Indochina War (1946-54).

Vietnam War (or Second Indochina War) - An Asian conflict involving communist North Vietnam, Viet Cong guerrillas, the United States and US-backed South Vietnam. It erupted in 1965 and concluded with the communist takeover of Saigon in April 1975.

Vietnamization - Plan adopted by the Nixon administration to turn over control of the Vietnam War to South Vietnam while U.S. troops withdrew.

Virgin Lands - Campaign launched by Khrushchev to cultivate Soviet grasslands in central Asia; Khrushchev boasted the Soviets would overtake the Americans in wheat production.

Vladivostok accords - Signed by Ford and Brezhnev in 1974, the Vladivostok accords set a limit of 2,400 for the total offensive nuclear weapons each side could possess.

Ww

War of the Trousers - Influence of Western fashion on the Soviet Union in the late 1950s and early '60s was evident in the popularity of "narrow trousers." Special patrols were organized to root out such influences.

Warsaw Pact - Soviet-led Eastern European defense organization established in Warsaw, Poland, on May 14, 1955; the alliance countered the U.S.-led North Atlantic Treaty Organization (NATO).

Watergate - Scandal that led to Nixon's resignation in 1974 after it was discovered the Republican White House planned and covered up a burglary at Democratic Party headquarters.

Weapons-grade material - Nuclear materials that are most suitable for the manufacture of nuclear weapons, e.g., uranium (U) enriched to 90 percent U-235 or plutonium (Pu) that is primarily composed of Pu-239 and contains less than 7% Pu-240. Crude nuclear weapons (i.e., improvised nuclear devices), could be fabricated from lower-grade materials.

White guards - Anti-Bolshevik forces who lost the Russian Civil War to the Reds; they included monarchists, constitutional democrats and socialists.

White House (Moscow) - Russian parliament building that became the rallying point for Yeltsin and crowds of Muscovites during the failed coup to overthrow Gorbachev.

Wind of change - A phrase from a speech given by British prime minister Harold Macmillan in South Africa in 1960. Macmillan was referring to the rising tide of nationalism in Africa, as well as opposition to the South African government’s policy of apartheid. Macmillan’s speech is often cited as a shift in British policy, away from imperialism and towards decolonisation.

Xx

X-ray - A discrete quantity of electromagnetic energy (photon) without mass or charge, emitted by an X-ray machine; similar to a gamma ray but with lower energy.

Yy

Yield - The total amount of energy released by a nuclear explosion, generally measured in equivalent tons of trinitrotoluene (TNT). A kiloton is equivalent to 1,000 tons of TNT; a megaton is

equivalent to one million tons of TNT.

Zz

Zero Option - Western German peace movement proposal, later adopted by the Reagan administration, that called for the ban of all European intermediate-range nuclear forces.